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DR. E. S. HULL,
WILLIAM MUIR,
CAREW SANDERS,
FRANCIS GUIWITS.

COLMAN'S RURAL WORLD,

Is devoted to the promotion of the
AGRICULTURAL, HORTICULTURAL AND STOCK
INTERESTS OF THE VALLEY OF THE MISSISSIPPI.
It is issued on the 1st and 15th of every month, in
quarto form, each number containing 16 pages, mak-
ing a volume of 384 pages yearly. Terms—\$2.00 per
annum in advance; Four copies, \$6; Ten copies \$15,
and a Premium of Five Concord Grape Vines to any
one sending the names of Four subscribers and \$6;
and Fifteen Concord Grape Vines to any one sending
the names of Ten Subscribers and \$15.

ADVERTISING TERMS.

A few appropriate advertisements will be inserted
in the "Rural World and Valley Farmer," at the
following rates: One square (being ten lines of this
type or an inch in depth), each insertion \$2; One
column, one insertion, \$15; and \$10 for every addi-
tional insertion. One-half column, one insertion, \$8;
two insertions, \$15, and \$6 for every additional in-
sertion. These rates will be strictly adhered to.

BUTTER MAKING IN THE WEST.

With the best breeds of cows, and the richest
and most luxuriant pastures in the world, the
markets of the West are supplied with the most
miserable article called butter that we have any-
where met with. If the agricultural papers are
read, there can be no lack of information in
regard to the proper method of making the best
butter. This is repeated again and again every
year in almost every paper in the country.

The chief requisites for this business are—
care, the strictest cleanliness, and a suitable
place to set the milk.

With our most extensive farmers, this branch
of domestic care is hardly expected to com-
mand that intelligent supervision required to
secure a good article of butter, because the
whole management of the dairy is left to the
servants, who are not expected to know but
little more of the important requisites for
producing a well-worked, good, sweet specimen
of butter, than they do of performing one of
the most intricate experiments in the chemical
laboratory. Now, as a general thing, is the
business better understood, or the process more

correctly performed, by the mass of country peo-
ple who supply our markets with butter. That
which is generally exposed for sale, neither
possesses the color nor flavor of a genuine ar-
ticle, and is too often brought in vessels, the
appearance of which is in no way calculated to
excite the appetite or to invite purchasers of
refined taste. That which is taken in at the
country stores, and sent to the city markets,
frequently comes in boxes that have performed
the office of transporting boots and shoes from
the Eastern manufacturer. On the tables of
some of the public houses that we now have
in mind, and in steamboats, the butter often
only lacks the proper solidity to afford a very
fair representation of a piece of Italian marble
of the most exquisite shades.

Much of this shaded, oily, miserable article,
is bought by boarding-house keepers, to use in
cooking, because it can be had a few cents a
pound cheaper than butter of a tolerable qual-
ity, and those who would refuse butter, even of
a much better quality, are compelled to eat it
in the various dishes set before them, while its
pungent rancidity would do violence even to
the palate of an Esquimaux.

There are, among our acquaintances, many
of the best housekeepers in the country, who
are noted for the excellence of the butter they
make, and who are never under the necessity
of sending it to market for a purchaser, but
who have standing customers in the city who
secure annually all they can make at the very
highest prices. With the advantages possess-
ed, or at command, by our Western farmers,
there are no well-grounded reasons why our
markets may not be supplied with butter and
cheese, in quality equal to the best brands of
"Goshen" or the "Western Reserve." It is on-
ly because the necessary care and attention are
given to the subject as a business, by the
farmers in those sections of the country, and
not from any peculiar advantages possessed by
them, that give their dairy products such a
superiority in market.

The greatest cataract in the world is the Falls
of Niagara.

The greatest cave in the world is the Mam-
moth Cave in Kentucky.

EXAMPLE IN FARMING.

The farmer wants an eye out as well as a
hand busy. He wants to see what his neigh-
bor does; and when he does this, he wants to
lay aside prejudice—he must not think he
knows it all—he must get good where he can
get it, and get it honorably. Your neighbor's
business is a great instructor to you, if you will
take advantage of it; it is like an extension
of your own farm with the experiments, the
losses and the successes: by both we are profit-
ed. It is an important thing; it is money in the
pocket; it is like reading your paper; like at-
tending a fair—only more so. No agricultural
paper can give you the eye-facts. There they
are as though you had practiced them yourself.
And the soil is like yours, joining it. Your
neighbor is willing to bestow his information—
what you do not get by seeing yourself. Much
good is done in this way; much more should
be done. And, remember, it costs you nothing
for this knowledge. What an advantage
is here—all around us; it is like the manure
in the atmosphere, to be had for the getting (as
with the grains). Your neighbor's fields are
books; read them.

BEST KIND OF CORN HOUSE.

The evils attending the corn-house, as usual-
ly constructed, are—the amount of rain and
snow which drive in between the vertical siding,
necessarily open to admit air—and, what is
far worse, the moulding of the corn next the
floor for want of air.

Having occasion, a few years since, to build
a corn-house, I adopted the following method
for avoiding these evils:

First—the frame was thickly studded, to re-
ceive horizontal siding. Next—the siding was
clap-boards or common house-siding, six in-
ches wide, and lapped one inch and a half. To
admit air, put a thin board under the lap on
each stud. It may be from one quarter to one-
half an inch thick, and two inches square. Or
perhaps a better form is, six inches, or the
width of a siding in length and two inches wide,
slanting off the upper end with a draw-knife or
shave. Strike a line on each siding for the lap,
and tack the blocks on to the line and the stud

above. A little light snow will occasionally drive through these crevices; but will soon disappear without sensibly wetting the corn.

To prevent molding in the bottom, make a floor of boards three inches wide, with spaces of an inch between. The flooring should be over an inch thick. This kind of flooring, of course, is only for the bins. The joists or sleepers should be near together to support it. On such a floor you can make the bins as wide as you please.—*Cor. Western Rural.*

[Written for Colman's Rural World.]

THE ST. LOUIS FAIR.

BY A RUSTIC.

As in duty bound we went there, and give our impressions. It was a magnificent exhibition of moral and *materiel* courage in the Directors to face and overcome the interruption caused by the war; but higher, nobler still, to face the *pestilence*, ever more dreadful than the sword. As a grand fact illustrative of the high destiny of Missouri, it is a triumph! and we are pleased to know that the *materiel* has not been sacrificed at the shrine of the moral; the week which ought to produce \$36,000, has attained the magnificent proportions of \$75,000.

The exhibition of the social progress of society as represented by the overflow of visitors was encouraging indeed.

Pomology was very poorly represented; this arose largely from the fact, that people having only small collections, thought it useless to exhibit, and each one leaving it to the other, it failed entirely.

We saw, in St. Louis, two barrels of Fall Pippins, of which a large proportion weighed a pound and a quarter actual weight; they were grown by James Graham, Glencoe, and would have beat all at the Fair. Fine samples were exhibited by several growers, among which we noticed, with pleasure, a fine collection by Mr. Yelton, of Johnson County, Mo., comprising along with the older, familiar varieties, some fine seedlings of the western portion of our State—among them, Zoll's Favorite, Queen of the West, Kirby Red, Robbison's Pippin, Missouri Pippin, Yellow Spice, Snake or Key's Green, Tyler, Hutchison Pippin, Johnson Co. Pippin. Some of these, no doubt, will prove to be old varieties, but Mr. Yelton has promised to send sample trees to the State Pomological Society for the Fruit Department of Mr. H. Shaw's Garden.

In Grapes, Mr. Jewett deserves great credit for his indefatigable attempts at the open air culture of foreign varieties.

Vegetables showed well, and Mississippi Co. was very large on Beet.

The Ladies showed their interest in the Department of Domestic Economy, by the attention they paid to Home Made Bread. It is truly the staff of life, and it was a most pleasing object to see that many of those who were gracing the vast assembly with their presence in the very height of native loveliness and fashionable adornment, looked with genuine pride upon the beautiful loaves, &c., which had engaged their taste and skill during the week before. To us animals, men, dress and adornment

is fine indeed, but they can't fill the place of light bread and biscuit in our conceptions of a happy home.

In Bee-hives, we saw only one, that of Mr. King, of Nevada, Ohio—a nice article, but troubled with a multiplicity of parts and a patent. It was exhibited by a gentleman from Johnson Co., Mo., and tends to show the interest that is being awakened in our State in improvement.

It is ennobling to see that among those men and in those districts that have suffered most in the war, there is so much energy and intelligence. The readers of the *Rural World* will be pleased to see their addresses, &c.

Labor-saving machines and implements were well represented. We pass over those general articles, such as Zimmerman's Stationary, Kinglands & Ferguson's, and the Ohio Co.'s Portable Steam Engines, to the more unassuming Sewing Machine, Knitting Machine, and Spinning Wheel. In Presses, Mowers, Reapers, Crushers, Evaporators, Plows and Harrows, there was a fine assortment. And when we saw the fine display made by Mr. Koenig, of St. Louis, we wondered, and asked why he was not even noticed in the late Report of the State Board of Agriculture, while page after page was devoted to another house. Barnum & Bro., Plant & Bro., and L. J. Bush & Bro., made excellent display.

The Floral Hall was a gem, and we were much indebted to M. G. Kern, Carew Sanders, Henry Michel, Chas. Beyer and others, for the information and pleasure that their labors afforded. The pompously strict agent of Mr. Cousins, would not permit us to examine, so as to describe, a beautiful bouquet of dried ornamental grasses, which worthily bore the blue ribbon. At this we were sorry, as this is a department of floral taste and skill that is of great importance, as affording much pleasure at a season when Flora denies us the usual enjoyments.

The Art Department was very fine. In the Rustic and Needlework especially we were much interested, as contributing so much to elevate and improve our farmers' homes. We were much disappointed at not seeing a drawing or model of a beautiful rustic cottage, now being built by Mr. Wolcott, of St. Louis, Co. It is a gem—curious, beautiful, and in every respect interesting, and hope he will give a sketch of it in the *Rural World*.

The Poultry Yard was well represented by some truly fine specimens, which will be more fully noticed, along with the Live Stock, in a future article.

From Troy, Mo.

N. J. COLMAN, ESQ.—The weather has at last become fair, after several weeks of almost incessant raining. Scarcely any of the farmers have sown wheat in this section. No peaches and a very limited supply of apples. Frost of the last week has done no material injury to corn or tobacco. I have not noticed in any number of the *Rural World*, any treatise on the cultivation and management of the Castor Bean. Respectfully, GEO. W. PORTER.

SOWING BLUE GRASS SEED.

In answer to certain inquiries concerning the growing of Kentucky Blue Grass, Mr. Fassett, an extensive farmer, residing near Springfield, Ill., gives in the *Prairie Farmer*, the following very sensible directions:

The opinions of farmers differ in regard to the time that Blue Grass should be sown.—Some advise sowing it in the spring; others recommend to sow in August. My own experience is, that the best time to sow any and all kinds of grass seed is, from the middle of February to the middle of March in this latitude; further south it would probably be better to sow some earlier; further north, some later.

The seed should be sown before it is done freezing. The spring freezing and thawing of the ground covers the seed to the proper depth to germinate—which is the only way I know of to get it all covered so that it will grow.—The spring rains bring the plants to such maturity, they get such a strong hold of the ground before the dry, hot weather of summer comes on, that they are able to stand it; that is where grass seed is sown without any other crop, which I think is the only way to insure a good stand.

One-half bushel, or seven pounds of blue grass seed is considered to be the right quantity to sow to the acre to make a good stand. I think it much better to sow Timothy and red top with blue grass. Blue grass makes but a slender growth for the first two or three years after it is sown. The Kentuckians say that Blue grass pastures continue to improve thirty or forty years. Timothy does its best right along the first few years, and then begins to fail. Red top has more of the nature of Blue grass, but makes a stronger growth much sooner, and will make about as much pasture, but will wither sooner in cold weather. Like Blue grass, it spreads from the root, making a perfect award. The Blue grass will eventually run it out as well as the Timothy, and take entire possession as it arrives at maturity.

I would recommend to sow four quarts of Timothy, six pounds of Red Top, and four pounds of Blue grass seed to the acre. As to seeding soon after timber is denuded, I cannot speak from experience, but can see no reason why the three grasses would not do well.

I know it to be a first rate way to make pasture on new prairie lands that have not had the wild nature killed out of them by cultivation sufficient to grow Timothy and Clover successfully. I do not know whether Blue or any other grass seed will grow well that is two or three years old. I would prefer to sow fresh seed.

[As doctors will always disagree in certain cases, a Kentucky correspondent sends the following criticism upon the above article by Mr. Fassett.]

I must beg leave to differ with Mr. Fassett as to the time for sowing Blue grass seed. He prefers from the middle of February to the middle of March. That will do in some cases, but the best time is early fall, with wheat or rye. This brings the Timothy up before winter and the Blue grass comes up in the spring with

sufficient root to withstand the heat and drouth of the following summer.

The quantity of seed (seven pounds per acre) that he grows, is not sufficient to make pasture for several years, though if it could be well separated before sowing, it would do; but beat and thresh it as you may, it sticks together and distributes badly in sowing. The quantity should be two bushels per acre, carefully sown. It is better to cross-sow after the wind changes.

Keep stock off after you glean the field, until the following June or July, at which time you will have a beautiful pasture.

If you wish to sow in timber, use the same quantity of seed, and "root" it in with hogs. Sow a small piece at first, mixing in some oats, rye or corn, to make the hogs hunt after the grain; then sow another piece in the same way until you have finished the whole field.

Age does not destroy the vitality of the seed, nor of any other grass seed, if kept from heating. I have sown Blue grass seed that was six years old, and had been kept in a bag in a dry cellar. It is almost impossible to heat it. No one should sow seed of any kind, that has been kept in bulk during the summer months, as it goes through too much sweating, if kept in a heap or granary. If spread on a floor where it can get the air all the time, there is no danger.—*Ohio Farmer.*

TOP DRESSING.

By various methods, through different seasons, I have learned that masses of rich, nitrogenous manures are annually lost, or nearly lost, by being buried below plant roots, instead of being applied to the surface in either liquid or solid form. Whoever seeks to copy nature, will learn, by observing her operations closely, that she never enriches her products with crude masses of concentrated substances; but gives her stimulants in minute proportions, chiefly from the surface of the earth.

It has been urged against top dressing, that the decaying manure gives a large portion of its ammonia to the atmosphere. It is undoubtedly a fact that some ammonia does thus pass off, yet accurate experiments have established another fact, viz: that the absorption by the manure of moisture and its ammonia more than compensates for the amount thrown off.

Where manure lies exposed on the surface, decomposition takes place slowly, and the solubles, (potash, lime, soda and the phosphates,) are not volatile, but remain to be appropriated by the plants as required.

The slave of Bacchus, who uses his stimulants, claims "that he is warmed in winter and cooled in summer." This is exactly what mulching and top dressing do to the soil. Darkness, moisture and air, are the requisites for vegetable and mineral decomposition. These requirements are met by surface manuring, and the chemical constituents, when set free, at once become food for vegetable life. As the manure disappears from the surface, it is washed into the soil in the precise condition required by the growing plants, which, in turn, become active agents in carrying forward chemical changes through the entire surface on which they act.

Waste no manure by burying it all in the soil. Top dress in July and August, and make the fierce rays of the summer sun a chemical laboratory to enrich your fields. Top dress in September and October, and make the autumn rains distil upon your lands showers of ammonia. Top dress in spring, and make the harbinger of plenty to distribute over your fields the wealth accumulated by the frosts and snows of winter.—*Cor. Rural American.*

From Calloway County, Mo.

ED. RURAL WORLD: I arrived in this vicinity (Williamsburg) a few days ago. The "burg" is very prettily located about the centre of Nine Mile Prairie, and is surrounded by some very fine farming land. The prairie is gently undulating, dotted here and there with groves of trees, either of natural growth or planted by the farmer as a protection for his buildings, both from the summer's sun and winter's winds.

The general appearance of the country denotes the thrifty, enterprising character of the people. The farms are large, well-laid off, and enclosed with hedge or good rail fence. I see some very good hedges that have been "turned out," and are proof against any invader, either two or four-footed.

The fields are clean and fences in good order.

Another proof of the progressiveness of the farmers, is the quantity of good machinery being introduced—improved reapers and mowers, wheat drills, corn-planters, gang-plows, sulky cultivators, sorghum mills and evaporators, and various other implements, that show the farmers fully appreciate the value of improved farm machinery; and I think the farmers of Calloway County will not long be behind their neighbors in Illinois, in that line.

The crops, as elsewhere, have suffered severely this year from the drouth; there will not be more than half a yield of any of the cultivated crops; the grass crop was also very light.—Wheat froze out badly last winter, and is considered a very uncertain crop on the prairie on that account. Rye is more certain, and attention is being directed to that as the main crop. Sorghum is grown to some extent, both the black and red seed. The former is considered the best. The vertical three-roller mill and Cook's Evaporator are generally used to manufacture it.

Considerable attention has been paid to the raising of stock, especially mules, of which there are large numbers raised and mostly shipped; but, with the exception of a few brood animals, there are but very few fine horses. Of cattle, I see some very nice herds. In way of blood, the Durham predominates, and are thought the best for general purposes. I see but few full-bloods, except a fine Durham bull, owned by Mr. S. Grant, that has received several premiums, I believe.

The disease known as Texas fever, has been prevailing to some extent in the vicinity. This is supposed to be communicated through the grass, upon which diseased animals have been grazing; and as no remedy has yet been discovered, it proves fatal in from two to four days. The symptoms are, a drooping of the

head and ears, refusal to eat, and considerable fever, with stiffening of the limbs; the animal dying the third or fourth day after it is discovered, without a struggle. It is not supposed to be contagious, but is communicated as above stated, and was evidently brought here by the droves of Texas cattle passing through.

Sheep are raised to some extent; the breeds are the common with a mixture of Cotswold, South-down and some little Merino. I have seen one small flock of nearly full-blooded Merinos. The South-downs are preferred as possessing advantages for the farmer, as it is a mutton sheep and yields an average amount of wool that is better adapted to the wants of those (who have not convenient access to manufactories) than the finer Merino wool.

Among the farms that I visited, was that of Mr. Huron Burt, who is a progressive farmer in every sense of the word. One to see his fine library, composed of valuable works upon farming, would perhaps call him a Book farmer; but the neat appearance of his farm and the number of useful machines and implements he has, show that he has not been an idle reader, but has practiced what he has read. He has a fine young orchard, and a No. 1 fruit house built in the most approved style. His crop of apples this year would have been very good, but the wet weather during September caused them to make a second growth, which made them crack open very much, and will almost ruin the crop.

The weather for the last few days has been fine, and if it lasts will enable the farmers to get in their wheat, which has been somewhat delayed by the long-continued heavy rains, which will prevent as much wheat being put in as would have been if they could have used the last two weeks for the purpose. The fine weather is very favorable to those tobacco raisers who did not cut their crop immediately after the frost on the 22d, as did a great many, which was unfortunate, for a large portion of it was green, and as there has been no frost since it could have ripened very well. Growers who have their last year's crop on hand, refuse to sell at the low price paid now.

The horse thieves, who have been very quiet since the war, are commencing operations, as I see by the county paper, in the western part of this and Boone counties. Farmers would do well to insure their stock against theft and thus assist in detecting the rascals. More anon.

Calloway Co., Sept. 30.

OBSERVER.

SHEEP ESSENTIAL TO GOOD FARMING.—"One thing that struck me very forcibly was that all farmers testified that sheep-raising was absolutely indispensable to successful farming; that their manure was necessary to preserve the fertility of the soil; and that without them the whole Kingdom would in a few generations be reduced to barrenness and sterility. It is in this view that I regard sheep-raising in this country as more important to the ultimate and permanent prosperity of the country, than on account of their present profits. Whatever else may happen, we cannot permit this virgin soil and these beautiful fields of ours to be reduced to barrenness by the time they pass into the hands of our children and grand-children. Their fertility must be preserved at all hazards, even at the expense of present profit."—*Lieut. Gov. Stanton, Ohio.*

Missouri Cattle in Illinois.

A large number of cattle offered for sale at the great market of Chicago, have been purchased in Missouri at the age of three years, taken into Illinois and fed for a year, in order to prepare them for the market.

The natural grass of the prairie is nutritious and fattening so long as it continues green and succulent, but it loses its good qualities when it becomes ripe or withered by frost, and in this state it is not relished by stock, nor is it good for them.

In winter the cattle get as much hay as they can eat, and plenty of corn, but as they are not housed, they fall away very much and lose all they have gained in summer and the early fall months.

The farmers of Missouri do not house their cattle, but they have thick bushes and groves into which they drive them in winter for the purpose of feeding. This rude shelter is better than none at all, but it does not keep up the natural warmth of the cattle, and they get into a very low condition before spring, so that a three-year old steer which can be bought for \$50, would be worth \$100 at that age, if the condition attained in summer had not been lost in winter.

The cost of bringing stock from Missouri to the Chicago market, amounts only to about half a cent a pound, so that a wide field is now open for enterprising capitalists to enter on the business of stock raising west of the Mississippi. When an improved system of agriculture is brought to the aid of the natural advantages of Missouri, stock will be sustained by suitable forage and shelter, and their improvement will not be checked nor their growth stunted by the drouth of summer or the cold of winter.

The Quincy, Burlington and Chicago—the Illinois Central—and the St. Louis, Alton and Chicago Railroads, draw large numbers of Missouri cattle every week direct to the Chicago market; and thousands cross the Mississippi weekly from Missouri to Illinois, which are bought up by farmers and fed for a year, as we have before stated.

It is said that there are at present about 80,000 Texas and Cherokee cattle on the borders of Missouri, awaiting transportation to Chicago, the Missouri authorities having refused permission to the owners of these cattle to bring them through that State, lest the disease called "Texas fever" should be communicated to the cattle of Missouri. Permission has been given to bring them through by rail, and they are being shipped by the Hannibal and St. Joseph Railroad as fast as accommodation can be obtained.

These Texas cattle are generally brought to market in a very poor condition; the best are bought by packers, and the medium and inferior by feeders. They are not thrifty, being stunted in growth by the protracted drouths which annually burn up the pastures of Texas. A three-year old Missouri steer generally weighs as heavy as a six-year old Texas bullock. The Cherokee cattle are much superior to the Texan—but they are inferior to those of Missouri.—In all that vast country west of the Mississippi, including Missouri, Texas, Arkansas, Kansas, the Indian Country, etc., cattle have increased prodigiously during the war, as the ordinary channels of communication with the great markets of the South and the East were obstructed in one way or another. Now that peace reigns supreme all over the Union, it is said that prodigious numbers of these cattle will be marketed in Illinois and other places. Let them come, they are wanted.

Illinois now possesses a cattle market, which for extent and internal arrangements is not equalled in the world. The facilities of conveying stock to and from this market, are unrivalled. It is time that farmers within the reach of these great advantages should lay

themselves out for profiting by them. It is said that example is better than precept, and certainly practical lessons may be learned in the Chicago market, where the contrast between cattle properly wintered and those which have borne the hardships of the bleak prairies without the mitigation of shelter, is so plain that "he who runs may read."

There is always a wide difference between the price of prime beef and that of inferior quality, which along with the deficiency in the weight of lean stock, makes a very serious drawback on the profits of the farmer. There are some feeders in Illinois whose stock always commands a ready sale and the highest price, because they have been kept on good pastures in summer, and wintered carefully in comfortable sheds.—*Western Rural.*

HORSE SHOEING.

The *American Farmer* publishes the following from a correspondent:

"Having raised a few, and owned a number of horses in the last forty-five years, not one of which has ever suffered with corns or lameness in any manner by bad shoeing, I send you the directions which I always give the smith.

"I take nature as my guide and follow her as near as possible. I do not allow the smith to take more off the hoof than would grow in the time the horse has had his shoes on. I do not allow him to pare the heels; but when he has finished the foot for the shoe, I allow him to rasp the heel gently. The shoe should never be put on so hot as to burn the hoof. The shoe on and the nails clinched, never permit the smith to file above the clinches of the nails; nature is not interfered with above the clinches, the friction of the sand and the earth is doing all that is required, and any interference by the smith is unwise, for every time he files the hoof the wall of the hoof becomes thinner, and is less able to resist the concussion, the cause of so much lameness in horses.

"I frequently, during the winter season, if there is snow on the ground, take off my horses' shoes, and drive them until they wear the foot to the natural shape. I have done the same in the city. When I find their feet sufficiently broken down, I have them shod, and the horse finds that he is much benefitted by it, and so will his master.

"It is necessary to have the feet of city horses stuffed two or three times a week; it keeps the horn soft, and causes less jarring to the many delicate membranes of the foot. Anything that will keep the horn soft, answers the purpose. I use a mixture of one peck of cow manure, half peck of ashes, and about two table-spoonfuls of salt, mixed together, which will last for some time, by adding, each time it is used, water enough to make it of the consistency to adhere to the sole of the hoof. By filling up to the level of the shoe, it generally remains until the horse is used.

"When I think my horses require shoeing, I have their feet stuffed two or three nights in succession before I send them to be shod, so as to make it easy for the smith to pare the feet."

The largest valley in the world is the Valley of the Mississippi, containing 500,000 square miles.

White Thorn Hedge.

In parts of Virginia, fences and the material for constructing them, having been destroyed, it occurs to me that a statement of a simple fact may prove beneficial to many, even to some whose fencing material is abundant.

The common White Thorn, well known in this region, forms a most effective fence, is very ornamental, and more beautiful than even the celebrated hawthorn hedges of England.

I first became acquainted with the value of the White Thorn for fencing purposes at Natchez, Mississippi, where a friend had introduced it on his place with very beneficial and satisfactory results.

This variety of the thorn may be better known and more extensively used in Virginia than I am aware of, but never having seen it under cultivation in this State, either for ornament or for field protection, and finding it growing abundantly here, I have determined not only to enclose my yard and garden with it, but to put it wherever a permanent fence is required.

As if nature intended it to facilitate man's labors, the White Thorn grows very readily from cuttings, as readily as the grape vine, and also yields abundantly small, red, cherry-like seeds, from which a nursery of the Thorn may be established while the farmer is deciding where to have his permanent live fences, and by this means complete his hedge sooner than from cuttings.

The cuttings which I planted out a few weeks ago are now growing, and the plants which I found growing from the seeds, probably two years old, being from two to three feet high, on being transplanted grew off at once.

The flower is white and very odoriferous, and the hedge, when well trimmed and in full bloom and foliage, is only second in beauty to the coffee plantations in bloom in the island of Ceylon.

The following directions are offered for setting a hedge of White Thorn, or as it is called in Mississippi, "Virginia Thorn," namely:

Dig a trench six inches wide and eight or ten inches deep. If the ground is not rich make it so by mixing good manure with the dirt from the trench, fix the trench with the earth and manure, and while loose, stick the cuttings in six inches apart, in two rows thus: and press the dirt well around them. Keep the hedge free from grass and weeds, and in four or five years you will have a beautiful hedge or very effective fence, if properly pruned and cultivated.

I have observed often that people go to the expense and trouble of sowing the Osage Orange seed, and then leaving them to grow among grass and weeds, and when the seed has sent forth a thifty shoot, even in all its disadvantages, instead of properly trimming and training the long switch like branches, and forming an effective hedge, they send a careless negro to cut them down, perhaps with a dull axe, and when they again grow up this process is repeated, and then the Osage Orange is pronounced a failure: and so it will be with many who try the White Thorn, they will plant it out carelessly, then neglect it, and finally pronounce it a humbug. Those who do not intend to do the work so as to benefit by it, ought not to attempt it.—[*Cor. Va. Farmer.*]

How to Grow Chestnuts.—Gather them when fully ripe, but not dry. Fasten them in a box or keg, and bury it two feet in dry ground until spring. Take it up as soon as the frost is out; you will find the nuts sprouted, some of them an inch long. If these shoots are broken off they will soon be replaced. Plant them in nursery rows, and cover with an inch of leaf mold. The young plants are tender, and should be covered with earth the first winter.

Never confide in a young man—new pants leak. Never tell your secrets to the aged—old doors seldom shut closely.

Osage Orange Hedge Growing.

BY W. H. MANN, BLOOMINGTON, ILL.

It is a well-known fact, that a large majority of those who have purchased hedge plants, have failed in growing live fences. Some have failed from ignorance—not having been furnished with proper instructions; while some have failed from mere negligence, not having carried out the instructions furnished. It is the object of this article to supply the wants of the former; and to induce the latter to make a proper use of the means in their possession.

It would be superfluous at this late date to discuss the necessity and importance of live fencing in the West. All admit that it is the only practical mode of inclosing our extensive prairies.

Farmers, who are such practically, and who live on their farms, can grow their own hedge much cheaper than hedge companies, who have to travel from farm to farm. But if you prefer to have your hedge grown by others, be very careful with whom you contract, as some of those self-styled hedge companies have no practical knowledge of hedge growing; neither are they responsible, as many who have been "taken in" can testify.

A perfect stand the first season, is the important point. This obtained, you will have few difficulties to contend with, unless you live among gophers.

KEEPING THE PLANTS THROUGH THE WINTER.

Select a dry and rolling piece of ground—open a trench—spade deep—let your trench be 10 or 12 feet long. Put in a layer of plants, 2 or 3 inches thick, and at an angle of about 50 degrees. Cover by taking a spade of dirt from the front; at the same time opening a trench for the next layer, and pressing the dirt firmly upon each layer with your foot. Repeat the operation till all the plants are trenched in.—When this is done, dig a trench around the bed, about three feet from it, throwing the dirt on the bed, covering one foot above the top of the plants, and extending two feet beyond them. Let it remain till the ground has frozen from four to six inches deep, and then cover two feet with straw, and weight it down with frozen crusts of earth sufficient to hold it to its place. Should you use fresh manure from the stable, instead of straw, it will not require to be so thick. The object being to keep the plants as near the freezing point as possible, without letting them freeze. Be sure that the covering extends at least two feet beyond the border of the plants. Plants may be kept in a cellar, packed down in moist, but not wet dirt or sand.

When plants are received in the spring, they should be immediately trenched out, just as you trench in the fall, omitting, however, the additional covering.

PREPARATION OF THE GROUND.

The hedge-row should be plowed out the fall before the hedge is to be set, and finished with a deep dead furrow on the line where the plants are to be set. In the spring, before setting, back furrow slightly, ridging the ground where the plants are to stand; and pass the harrow over it two or three times. On wet or sprouty ground, do not open a furrow on the line in the fall plowing, but back furrow each time the ground is plowed, thereby ridging up the bed where the plants are to stand. Plants set on low, wet ground, are liable to be spued out by the winter frost.

HANDLING AND ASSORTING THE PLANTS.

As soon as the cold weather is over, remove the straw from the beds. When the frost is out of the ground, and before the buds begin to swell, the dirt should be thrown off, and the plants taken out and carefully assorted into two or three classes, according to size—all doubtful plants being thrown one side. As they are assorted, they should be trenched in, each lot by itself, leaving two or three inches of the

tops exposed to the sun, in which condition they may remain till they are wanted for planting. Should the plants at any time become partially dried, they can be revived by soaking in water or being buried, so that each plant shall come in contact with moist earth.

TIME OF PLANTING.

The best time to set the hedge is when the buds have started; though, if the season is favorable, it will do as late as the 15th or 20th of June. The buds may be kept back for late planting by leaving the winter covering on the beds until near the time the plants are wanted for the hedge-row. Hedge set early can be re-set the same season, by reserving a few of the best plants until a seasonable time in June, when those that have failed to grow can be replaced by such as you know to be good.

NUMBER OF PLANTS PER ROD.

Though a good hedge may be grown by using any number of plants from sixteen to fifty per rod, a long series of experiments in hedging, in which the plants have been set from four to sixteen inches apart, have convinced me that about eight inches apart, or twenty-five plants to the rod, is the desired distance at which to set them in order to insure the best and most reliable fence.

TRANSPLANTING.

An even, perfect stand, and uniformity of growth, in a beautiful, straight line, are the things most essential to success. When the plants are taken to the field, they should be distributed first along the line, about 100 in a place, and heeled in until wanted, and never left exposed to the sun or frost. Procure a strong cord, say from ten to fifteen rods long, marked plainly with red yarn, eight inches, or the distance you want your plants apart. There are two methods of setting. One is, to be set with the hedge-spade (the blade of which is longer and narrower than the common spade), in which you thrust in your spade its full length—slanting. You then raise the handle slightly, letting a boy push the plants down at least three inches deeper than they stood in the nursery, tramping the dirt firmly to the plants with your foot. If the ground is wet, omit the tramping, as it will cause the ground to bake. The other method of setting, is that known as "setting in the furrow." In either mode, the line should be carefully staked; but twice the number of stakes are required in the latter. In opening the furrow, use a strong, steady team and good plow, in the hands of an experienced plowman. Any slight crook may be straightened with the spade. After the furrow is opened and line stretched, take a bundle of assorted plants, and placing them against the land side, fill in a little dirt with a hoe, pressing it to the roots, and when the plants are all in, fill up the furrow with a plow. But be careful not to disturb the plants with the single-tree, nor allow the horse to mis-place them with his feet. The roots of a sound, healthy plant, when cut, present a white, bright appearance; those of a yellow, dingy cast, between the bark and wood, should be rejected as doubtful. A good, heavy coat of mulching applied immediately after the plants are set, will be of great advantage in keeping back the weeds—preventing injury by the drouth, and furnishing protection to the hedge the first winter.

RE-SETTING.

If you fail in getting a perfect stand the first season, procure enough extra strong plants the second season, and fill up all gaps as soon as the buds begin to swell. Re-setting after the second season is of little use.

CULTIVATION.

If well mulched, the hedge will require but little further attention the first year, otherwise it should be kept clean and free from all weeds and grass, and covered up with a furrow from

each side before the ground freezes—a two-horse plow being used. In the spring uncover, and cultivate as you would a row of corn, which cultivation should be repeated every season till the hedge is five or six years old.—Maure should be used in all places in the hedge-row where the soil is too thin to give a good yield of corn under good treatment.

TRAINING THE HEDGE.

It has been demonstrated beyond a doubt, that this clipping and shortening-in process from its infancy (that was so universally recommended a few years ago), is not the proper way to treat a hedge. Most hedges so treated, have the appearance, when not in foliage, of standing on stilts, and make but poor barriers against hogs or sheep. Many farmers seem quite indifferent on this point, however, as hogs are not allowed the liberty of the streets; yet would there not be much grain saved after the wheat or corn is harvested by pasturing the stubble or stalk-field with hogs? Hog-proof fences are necessary to keep hogs in, if not out. All the trimming that is required while the hedge is young, is an occasional clipping of the over-grown shoots, which should be done late in June, in order to check them, so as to obtain uniformity of growth.

FLASHING.

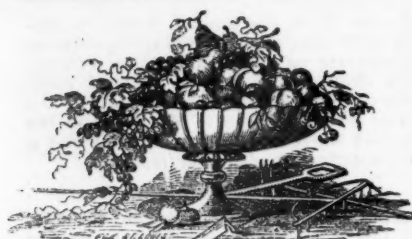
This should not be done until the hedge is five or six years old, when it will be from ten to twelve feet high, and the plants from one and a half to two inches in diameter at the base.—A firm, solid foundation must be had if you expect a substantial, lasting fence; and if flashed while the plants are little more than switches, this will not be had. Before flashing, which may be done in mild weather in winter or early spring—before the sap starts—trim in the sides of the hedge with a hedge-alasher or corn-knife, to two feet in width. With a light, sharp hatchet, cut the plant about half off at the collar, or at the yellow bark. Be careful to cut low. Begin at one end, pressing back the plants as you cut them, leaving about every fifth or sixth plant. Cut it off three or four feet high; weave others down in them, pressing down so that they will not raise up. Be careful not to hack or cut the plants any deeper than necessary to prevent them from raising up. When through, gather and burn all brush, unless it is needed to patch up old fences, for which it answers an excellent purpose. A hedge thus treated will throw up numerous shoots from the stump and along the trunk, which, with the part laid down, will make a perfect network of thorns. Many of the unsightly brush-rows designed for hedges when set, may yet be made passable hedges by the above treatment.

AFTER-TRAINING.

The hedge should be trimmed twice annually—in the fall or early spring, and last of June. Mr. D. Oliver, of Carthage, Ill., has invented a horse-power hedge-trimmer, which promises to do this work well with little trouble and expense.

GOPHERS.

Farmers living between the Mississippi and Illinois rivers, and other localities where the gopher is unknown, have but little or no excuse for gaps in their hedges. It is truly discouraging when you have taken all possible pains to get a perfect stand and good growth the first season, to find, late in the fall, that gophers have cut off a fourth, or even a third of the plants, a few inches under the surface, which they often do. It is almost impossible to fill up gaps thus made, unless you first trap the gophers, as they will continue to take the replants year after year. To trap the gopher, use the common steel rat trap in his underground track, a little below the bottom of it, and slightly covering it.



HORTICULTURAL.

[Written for Colman's Rural World.]

Fall Against Summer Pruning.

It is important that we know the effect of pruning upon our fruit trees. But it seems this is not yet fully understood. Where so many modes prevail, no standard is established—the secret of nature is not yet revealed.

What then are we to do in such a case? We can but adopt the most intelligent views, and leave to future experiment the solution of the subject. Let us look a little into the matter, and see what has been done.

It is well known that summer pruning is injurious to the constitution of the tree, but favorable to fruit: the life of the tree must be measurably sacrificed to produce fruit—for it is not disputed, we believe, that a tree is short-lived in proportion to the hurt it receives, whether that hurt is from the frost, insects or the pruning-knife, or from some other cause.

Trees vary in longevity in different sections. Climate, no doubt, has a principal influence here. But the different influences are additionally brought to bear upon the tree, and these undoubtedly shorten its duration.

A healthy tree, in a healthy situation, and under favorable circumstances, will live its full term in an indigenous state. We have not the data to determine what that term is with regard to fruit trees in a wild state; but taking analogy, it must be longer than the term of cultivated trees. There is quicker development and greater growth under pressure, but always—if we reason from analogy—at the expense of constitutional power.

Now, whether it is best to hasten this growth and increase by it the amount and quality of the fruit, realizing in a less time what would accrue in a longer period, is the question. It will depend upon the comparative time and amount. This is not yet determined. Yet, we think sufficient is known to satisfy the inquiring mind that, a good growth, a good form, healthy and vigorous, fine, improved (and therefore increased in amount and quality), is preferable even at the expense of time—for the loss of time can well be supplied in a new growth of trees. This course will give good trees and good fruit. Let there be three lives instead of two. It takes but a few years to fill the interval of infancy. The gain in amount and quality of fruit, and in attraction to the eye, will more than counterbalance the small loss in the interval (of infancy).

But, all things considered, what is the most profitable mode of treatment, particularly in

pruning, to realize the greatest amount of benefit? It is not easy, satisfactorily to answer this question. There is sufficient, however, we think to decide us in the course we are to pursue. Summer pruning has its advantages and its disadvantages. It hurts the tree and it benefits it. It hurts it by the shock the tree receives, especially when the pruning is severe: it sometimes kills a tree. On the other hand, not only are the wounds healed over the better, but there is an increase of the fruit-growing tendency, or a diversion of the sap into the channel of maternity. The fruit is there at least, improved and augmented. And this is what is wanted, fruit, improved and augmented. The tree, has, no doubt, a few years cut off from its lease of life; but it has more bushels of apples to show than could possibly have been crowded into those few years.

Are we not then the gainers by summer pruning, which of all others makes the neatest and best bearing trees? We think so. We advise it. Only avoid too great severity. Begin early, when the tree is young. Much may be done by thumb and finger—much to favor the growth and health of the tree. Still, lopping off branches is advisable—advisable to get up a check and divert the wood-growing current into fruit-bearing. Thumb-and-finger pruning will not do this, or in a less degree, varying in the various fruits, the pear being most susceptible.

Pruning in the fall, gives a tree a chance to adjust itself to the new condition by the gradual progress of the flow of the sap in the spring, and its slight action during the winter. In a half-torpid state, the shock is not so severely felt as when the tree is in full vigor. Severer pruning, therefore, may be indulged in in the fall or winter or early spring, though the fall is probably the best. Indeed, we would recommend large limbs to be taken off in the fall—the wound to be salved over. But this is not necessary, save in neglected trees. All small-limbed pruning we would do in summer, when the trees are in foliage—any time after the blossoming period for several weeks ensuing.—June is the best month above 40° north latitude; but May will do south of that. The advantages of thus early pruning will secure the full season's growth without the intervention of winter to rot the wound. It will give it a chance to heal over with little injury to the wood. Summer pruning thus gives us shorter-lived trees, but more fruit and better—better, as the full force of the tree is engaged in the work, developing what flavor there is, and the quality and nutritive principle. This is exactly what is wanted—as it is for this that the tree is grown. There is not that dark sweep of branches, as in the case of fall pruning; but there are neat limbs, and a gentle, delicate tree—tender with maternity—bending under its weight, the weight of the good it does, and all for you as a reward. Such a tree will be liked: it is easy to form an attachment. We have such, with their crimson fruit, as bright and clean as if just out of the mold; slender branches, drooping, oppressed:—for whom is all this? For him who has reared it and nurtured it.

This is a young tree blushing. It is perfectly healthy—not rugged; with slender waxen limbs, and with fruit large, flat (wheeled), and a red (strawberry) that is not surpassed by the most brilliant of flowers. Here the æsthetic comes in for a large share. A rough, dark-colored, over-grown tree, even if well dotted with fruit, would not have the interest that the little tender female at its side has. We have grown this rugged tree for variety. We have others—Spitzenbergs, with high heads, their branches reaching down to the ground, red with fruit, all of a size, and at your hand to be picked. A few Fall Pippins are higher up, large and green, as if too rare to be easily reached. So of the shy Northern Spy, tender-limbed, but high up, hanging its fruit.

The general caste of the trees is chaste, subdued. They are willing agents to perform what is required of them—and most excellently do they perform it. This should be the object of an orchard—to benefit the mind (gratify the heart) as well as the pocket. And summer pruning will do this more effectual than fall treatment. F.G.

KENTUCKY POMOLOGICAL SOC'Y.

The earnest fruit growers of this State have just concluded their second annual session, which was held, like the preceding one, when the Society was organized, at the ancient village of Elizabethtown, in Harlin county. Here, in the midst of an elevated, almost mountain region, which has become quite noted for its fruits, upon the ranges known as Muldrow's Hill, some energetic Pomologists have called together their friends, who are interested like themselves in fruit growing, and have organized a State Society.

The exhibition was very creditable, occupying long tables spread in a convenient hall.—The fruits of the various kinds were very interesting to a pomologist, and attracted a great deal of attention from the citizens, who were present in goodly numbers. To a stranger, they were of the deepest interest, on account of their showing the effects produced on Northern varieties by their removal so far to the southward, and especially because the collections contained so many of those sorts which are traced to a Southern origin, and among these, many that have not yet fruited in the Northern orchards.

The labors of the Society at this session, consisted chiefly in receiving and endorsing the reports of the standing committees previously appointed and instructed to report on various topics connected with fruit growing. The Society was also engaged in collating and adapting fruit lists of such varieties as could be recommended to orchard planters, in the correction of nomenclature, in the consideration of entomology, soils, and kindred topics.

In the matter of insects, the members took important action, by subscribing liberally to that valuable periodical, called the *Practical Entomologist*, which has been distributing a great amount of information in regard to these pests, which must prove of the greatest value to all classes of our agriculturists, whether their labors be conducted in the field, the orchard, the

vineyard, or in the garden. The Kentucky Pomological Society will no doubt make valuable contributions to our fund of knowledge on this and other branches, upon which we all stand so greatly in need of extended observation and increased information.

The affairs of this young Society have been so well managed during the past year, that the leading officers and committee-men were unanimously re-elected: the well-known and successful fruit-grower, Lawrence Young, of Louisville, being the President, and Hon. Samuel Haycraft, Esq., of Elizabethtown, the Corresponding Secretary, or the organ of the Society during the year.

To our friends in Kentucky, who are at all interested in this branch of culture, we cordially commend the State Pomological Society as deserving of their confidence and support; and there is no doubt, that, with her admirable soil and climate, and the altered status of the labor element, very many land-holders of Kentucky will find it to their advantage to turn their attention to fruit growing. To such the elevated region crossing the Louisville and Nashville railroad in this portion of the State, offers especial attractions. A good soil and climate, with cheap land, cannot fail to be attractive to fruit growers seeking new homes.—*Our Prairie Farmer.*

Training Grape Vines in the Fall.

Those who have grape vines of the hardy sorts, will do well to see that they are now trained as well as pruned. Adjust them as you want them next summer. Especially should this be done with old or stout vines. Bending down is always more or less hurtful. Secure well, so that the wind cannot displace the branches. In the spring, the vine will be ready for work, getting the first benefit—all the benefit—of the growth. All wood of late growth, all that is unripe, clip off, as the frost will do it if you do not; or, if left, will not grow and perfect its fruit as ripe wood does.

F. W. LAY'S GRAPE SYSTEM.

We take the following from the *Journal of the New York State Agricultural Society*:

My vineyard consists of two and a half acres, situated upon the Ridge road in this town [Greece, Monroe county, New York,] four miles from the city of Rochester, and about the same distance from the port of Charlotte on Lake Ontario.

SOIL.

The soil is a gravelly sand at one side, but running to a clayey loam at the other; subsoil of the same. The lands on the south side of the ridge are all of a drift nature, and were probably at a former period the beach of Lake Ontario, and are naturally well adapted to grape culture.

EXPOSURE.

The ground slopes towards the North, and has a full exposure to the Western winds; it is well underdrained naturally.

SETTING AND DISTANCE APART.

My vines are set sixteen and a half feet apart in squares. No extra pains were taken with the soil previous to setting; it was moderately fertile; had raised good farm crops for many years; was manured lightly the second year after setting, with yard manure; no manure applied since. In this I attribute what

success I have had in grape growing. Large quantities of manure tending to a rank growth of wood and small growth of fruit.

CULTIVATION.

I plow the ground as shallow as possible in the spring, and spade up where the plow cannot reach. Through the summer keep clean with cultivator and hoe. I sometimes raise a few potatoes or beans between the rows, and sometimes have had nothing at all upon the land; do not think a crop like these injures the grape, but it will always be a light one, and barely pay the cost of cultivation, as the grape roots will very soon take pretty full possession of the ground. It will be perceived that my vines are set much further apart than most grape growers. My experience and observation has been that, when set six or eight feet apart, one or two heavy crops will be obtained, but the vineyard will soon fail.

TRELLIS.

My trellis is eight feet high. I first set posts of some lasting wood, eight feet apart and projecting about one foot above ground. To these are spiked with thirty lb. nails, two by four scantling. At the top of these I nail strips of one by three, and stretch four wires at equal distances apart below. Less posts would answer, were it not for the top strips of board, which keeps the whole steady and firm. I do not always train my vines to the top of the trellis, but like to have it high enough so that I can, if I choose. Some strong growing varieties require more room than others.

TRAINING.

I select three of the strongest canes, and keep all the others cut away, and train two horizontal on the wire, and the other train up the trellis. At distances of about two feet on the horizontal canes I allow a cane to run up, keeping the others pinched away, and thus until the trellis is filled. The original upright and horizontal canes will produce some fruit the next year after training; the others not till a year or two afterwards. I tie the canes to the wires with any kind of twine that will not soon wear on the wires—usually common cotton twine.

SUMMER MANAGEMENT.

I go through my vineyard in the spring and tie up all the canes that are loose, or likely to become so. Nothing more is done till the fruit is well set, which will usually be about the last of May. I then commence summer pruning by cutting off the side shoots, leaving two or three bunches of grapes upon each shoot and one leaf beyond the last bunch. Any shoot that has no fruit set, is taken away entirely. I afterwards go over them about once a week during the growing season, which generally ends about the first of August, and pinch in the shoots as they start out. This throws the whole strength of the vine into the fruit and produces large and fine bunches.

VARIETIES.

My principal varieties are the Isabella and Hartford Prolific. The latter I think the best for the early Canada market and the former for late keeping. I have also the Concord, Delaware, Diana, Catawba, Clinton, and several other varieties, some of which are valuable, and some of little worth; but with me, none except the Clinton have produced the crops that the Isabella and Hartford Prolific have.

CROPS.

My crop of late years has been about three tons to the acre, which, though not as large as one as those that set their vines closer, is a very satisfactory one. My grapes have been uniformly large and the bunches fine, and have usually ripened about two weeks earlier than others grown in this vicinity.

PICKING AND MARKETING.

I commence picking in the fall as soon as they are ripe, selecting the ripest bunches first, and pack immediately in small round wood boxes, holding about three pounds each. These

boxes I buy in Rochester in cases of twelve, and ship generally to Montreal, where the earliest sell at twenty-five cents per pound Canada money, and as they are always fine, all sell at fair prices. The later ones I pack in the same boxes after wilting them slightly, and dispose of for winter use, and will keep in these boxes till about the first of February. Packed in cotton batting, and this opened once or twice during the winter, and the cotton dried, they may be kept till April.

WINE.

I make some wine, but only from the loose grapes that fall off in packing, and the few small bunches that are unfit for market. I have also a few vines of Clinton that make good wine, but are not good for market. For wine, a grape should be thoroughly ripe, and none others should be used. I have made some wine without sugar, but ordinarily any wine will be more palatable to most persons by the addition of sugar.

WINTER MANAGEMENT.

I do not lay down or cover my vines in the winter; it is not necessary in this locality. I commence to prune in December. This is done by cutting away the bearing wood close to the cane, and cutting about one-fourth of the old canes away. I thus renew my canes once in four years, and make calculations during the summer pruning for this by leaving a young shoot to train in the place of the old cane cut away.

GENERAL REMARKS.

The cultivation of the vine is but in its infancy in this country, but general attention is now drawn to it, and immense quantities are being set; so much so that it may be overdone, till it settles down to a legitimate standard. The great fear is, that many will rush into it without having a proper soil and location; and though they may raise grapes, will never succeed in getting them of first-rate quality. The soil should be of a drift nature, and by all means be well under-drained naturally. Contiguity to a body of water is also an advantage, which will give a more uniform temperature. Outside protection may be advantageous, but a free circulation of air through a vineyard is very important, and should always be looked after. I think the North shores of Lake Erie and Ontario, through nearly their whole extent, will be found favorable to the grape; but only on small portions of it will the soil be suitable and the drainage sufficient. The same may be said of the vicinity of the small lakes in the central and western part of the State, where large vineyards are already in successful cultivation. That they may be largely increased with advantage to the country, will be generally admitted, and in favorable localities will be found very profitable to the producer.

[Written for Colman's Rural World.]

Will Severe Pruning Produce Mildew?

The *Country Gentlemen* (by the Editor) gives an instance where severe pruning of a Mahaleb cherry tree produced mildew. The principle has been reported in other places, and on other trees and shrubs, including the grape. No complaint, we believe, is made of wild grapes and trees left to nature, on account of mildew. We have yet to see the first instance.

What we have seen of the grape induces us to believe that severe pruning, especially during the summer, is injurious, hurting the life, the constitution of the vine. It certainly and harshly checks growth; it is unnatural. Why not produce disease, as it certainly does a loss of vigor—why not invite mildew? It is easy to imagine this may be done through some perversion of the sap, or interference with transpi-

ration. Thus we have "honey-dew" in some such way. Why not mildew?

We have a case in point. A Clinton grape-vine, ten years old, was left untouched for seven years, save here and there a little clipping. There were no signs of disease of any kind during this time. Close summer pruning then was resorted to, the vines having been well shortened the previous fall. Mildew set in at once severely. The year following, there was less pruning; also less mildew. The present, which is the third of summer pruning (in part of the vine), has no disease, save where the spurs containing fruit were pinched back. That is in places of the vine where the last year's wood was left, two spots of about two feet in diameter, densely crowded with fruit. The rest of the vine, occupying about ten feet square, is all ramified with canes grown the present season. There has therefore been but little pruning—and the effect is plainly visible. There is no mildew; the vines are bright and clear, save here and there a leaf showing rust. But where the fruit is, the rust is increased. Here there has been clipping the whole summer through. A few vines in town, which have had but little cutting, mostly what was done in the fall, and that not severe, have little or no mildew, or disease of any kind. It is so with vines out of the place, in the neighborhood.—The varieties are the Isabella, Concord, Clinton, Delaware and others. They seem to be affected alike.

There is no doubt that, in the long run, this severe treatment of the vine affects it unfavorably. It will do for a few years, but after that the accumulated evil seems to show. Locality seems not to make much difference, if indeed any save in degree, and that not often distinguishable.

F.G.

WINE MAKING.

It has been supposed that wine making was a difficult art, requiring great skill and long practice; and this is probably true of some rare and delicate wines. But sound and wholesome wine, and wine of good quality too, may be made without a large experience, if certain rules are observed which are within reach of the plainest common sense.

In the first place, care must be taken to keep all the vessels and utensils perfectly clean.—These should be of wood, as metal gives a bad flavor to the wine, which is sometimes a long time in passing off. If possible, have the mash tub large enough to hold a barrel of wine—if you have grapes enough to make so much—and a press that will enable you to fill up the barrel rapidly as possible, so that the fermentation may commence in the whole body of wine at the same time.

Let the grapes be ripe, but not over-ripe, that you may get their best flavor. It is not necessary to the making of a good wine, that much sugar should be present in the grape—that can be added; but it is best to secure the real wine-making properties, such as flavor and aroma and the gluten or yeast making property of the grape—and some of these properties are altered and sometimes impaired by over-ripeness, while your sole gain is the amount of sugar which the grape contains. Gather the grapes when dry, and if possible in a cool, dry day.

The casks should not be new, for the new wood, would be likely to give an unpleasant flavor to the wine. It is better to use casks

which have already contained wine or spirit, and which are strong and well-hooped; let them be perfectly sweet and clean also, and your casks are ready for use.

All grapes do not make equally good wine; some of the finest table grapes will not make wine; while some of our wild grapes, those which are not of too harsh flavor, will make a very good wine if you follow the method which I shall describe before the close of this article. My own experience is confined almost wholly to the Concord grape, which I treat as follows:

If I desire to make a delicate light-colored wine, I gather the grapes as soon as they are well ripened and take them immediately to the press, into which I put them, without stripping them from the stems or bruising them. The screw will press out nearly the whole juice, which often runs from the press without color, making a white wine. This wine has a very delicate and agreeable flavor, but does not keep so long I think as that which is fermented on the stem and skin and seed before pressing.

The grape rarely, if ever, contains sugar enough to make a sound wine, when it is grown at the North. An instrument called a Must Scale indicates the per cent. of sugar which the must contains, but as few persons will care to go to the trouble and expense of obtaining one of these, I mention another method, which is about as good and very nearly accurate.—Take a new-laid egg and put it into the must and add sugar until the egg will float on the liquid, exposing a circle equal in diameter to an old-fashioned cent, or about one inch. The amount of sugar you find to be necessary for one gallon will give you the proportion for the whole quantity you make from the same grape. Now press your grapes as rapidly as possible, and put the juice at once into the cask, which should not be quite full until fermentation is well a-going; then fill up to the bung and let it work over a little. If, however, the fermentation subsides, and the must shrinks back into the barrel, as it will sometimes do, add the yeast again (having caught and saved it for that purpose), and the fermentation will start again.

A vigorous fermentation is believed to be the best; if, however, the fermentation proceed slowly, you should keep the air from the must by laying on the bung lightly—or, what is better, by putting one end of a bent tube through the close fitting bung into the barrel, and the other end into a vessel containing water. The gas which escapes from the barrel passes through the tube into the water, from which it escapes in bubbles, and the water prevents any return of air through the tube into the barrel, to sour the wine. After several days, sometimes weeks, the fermentation subsides, and the liquor begins to clear, and the lees are thrown down.—Now is the time to draw off the wine, clean out the cask of all settlements, and after returning the wine to the cask, put it into a sweet and dry cellar to ripen.—Hon. E. W. Bull, Concord, Ms.

APPLES AS FOOD.—The importance of apples as food, has not hitherto been sufficiently estimated or understood. Besides contributing a large proportion of sugar, mucilage and other nutritive compounds in the form of food, they contain such a fine combination of vegetable acids, extractive substances, and aromatic principles, with the nutritive matter, as to act powerfully in the capacity of refrigerants, tonics, and antiseptics, and when freely used, at the season of ripeness, by rural laborers and others, they prevent debility, strengthen digestion, correct the putrefactive tendencies of nitrogenous food, avert scurvy and probably maintain and strengthen the power of productive labor.—[Liebig.

[Written for Colman's Rural World.] UNIFORMITY OF FRUIT.

This is a point we seldom think of—to have our fruit all alike, and all good, on the same tree. It is known that potatoes are better treated in this way, giving them a medium and uniform size. They are finer-grained, sweeter, and of full amount. So with apples, and with fruit in general. It is a principle we seem to lose sight of.

We have taken pains to give our apple-trees, and the few pears and plums we have, a chance to ripen and mature equally throughout. To this effect we have applied the pruning-knife, and made use of thumb and finger. Wherever there was a density of limbs we took out sufficient branches to give a good circulation, not only to the wind, but a chance for the sun to see what was doing. The inner foliage was all removed. Only the outside of the tree was permitted to fruit. Where limbs were too thickly set with fruit, they were thinned out; those less thrifty were also treated in this way, though there was less occasion for this, as fruit-trees, unlike grape-vines, have a pretty equal growth.

Some shoots, some whole limbs, were pinched back. In one instance an entire tree was treated in this way. This tree, suffering from a defective bole, shows decided marks of improvement in its fruit. There is not only a uniformity of wood-growth, but of fruit. Almost every apple on every tree has developed its color, and has size—a uniformity that is most gratifying. The only exceptions are the bitter fruit. That has suffered, and the trees have mostly freed themselves of it. With this exception, there is an equalized growth, but a very large, reaching almost the maximum. A finer lot of fruit we have seldom seen. Some sorts are less uniform, but still pretty even in consequence of the treatment. The crop of fruit, therefore, will be better: it needs little sorting—none, where the insects have not hurt it.

This treatment gives beauty to the tree, as well as improvement to the fruit. The effect upon the eye is almost magical. The color is so fully and so finely developed; each fruit is a beauty, and there is no defect. The advantage in this case is, that each apple, or pear, or peach, is a high development, rather than a uniform growth; and it is in the reach of all: we can all have such yield, and such quality.

From Hartville, Mo.

N. J. COLMAN, Esq.—The lice are utterly destroying the best apple orchards in this county. They seem to start on the trunks of the trees, spreading rapidly over the branches, and then on the apples—killing large trees in two years. Orchards on land descending to the North, are more subject to them than when planted on other land. Some men in this neighborhood have tried every remedy they could hear of, without effect, so far. What is an effectual remedy against them? R. B. PALMER.

The greatest river in the world is the Mississippi, 4,100 miles in length.

St. Louis Horticultural Society.

St. Louis, Saturday, September 22, 1866.

Society met at 2 p. m.

President Colman being absent, D. T. Jewett, Esq., was chosen President, pro-tem.

Fruits and flowers were exhibited as follows, viz:
 From Mr. Paddleford, Carondelet, five specimens of Herbmont and Ontario or Union Village grapes.
 From Geo. H. H. Hermann, through Dr. Edwards, Rogers' Hybrids, Nos. 1, 2 and 19, Martha, Cunningham and Peschel's Mammoth grapes.

From F. F. Fine, St. Louis county, an apple of large size, unknown, and specimens of a very large free-stone seedling peach, not yet fully ripe.

From Henry Michel, St. Louis county, flowers, viz: Eighteen varieties of Monthly Roses, and Passiflora Decasemiana. Mr. Michel's display of flowers was very fine.

From Colman & Sanders, St. Louis county, apples, viz: Huntsman's Favorite, Missouri Pippin, two varieties, unknown; Jones' Seedling Pear; also, Spirea Lindleyana in flower and seed; Calliearpa Cerulea, and Cucuta or Dodder in flower and fruit.

After considerable time spent by the members of the Society around the table, examining the fruits and flowers, the display of which was quite imposing, the deferred business, viz: Shade Trees, came up for discussion.

Mr. Peabody. I suppose Dr. Morse's essay read last week, and published with the proceedings, requires some notice. I will only say I don't agree with him about the alanthus for shade in cities. With this remark I leave the Doctor and his essay in the hands of the other members.

The subject of shade trees in our streets is too important to be passed by lightly. There is no reason in the world why our city may not in time be as well ornamented by trees as Cleveland or New Haven, or any other city. What we want is to know certainly the best kinds of trees to plant, and then urge upon all, especially property owners, the importance of planting them. Our citizens have for twenty years been experimenting on almost every kind of tree, but failure has so often resulted that many have got discouraged, and make no further effort. From the discussions here and from all the light I can get, I believe the elm and white maple will prove the best trees for the purpose. The elm is the tree where there is abundant room for it to develop. But where the houses are built directly on the line of the street, the white maple is best, because it does not require so much space to spread itself in. Now, trees have to be well put out, and then afterwards have to be guarded against enemies. Horses, mules and especially cows, which so run at large all through the suburbs, will gnaw and browse and tear down the young trees if possible. If these animals are allowed hereafter to run at large, it will require great care and constant watching. A row of large beautiful elms or maples, ten years old, are the price of untiring care and vigilance.

Dr. Edwards. As to the different varieties of trees, we all have our likes and dislikes. For one, I don't like the Alanthus. I am astonished that any man of taste should recommend it. Its rapid growth in almost any soil, is its only recommendation. I am for the elm and maple before and above all others. If the sugar maple would do well here, I should prefer it to the white maple. In addition to the elm and white maple, I will mention the ash-leaved maple, or box-elder. It is a hardy, beautiful tree, and does not require much room. In places where the streets are narrow, and the houses are built directly on the sidewalk, I would plant it in preference to any other. The linden is also a beautiful tree. I do not see why the American linden should not be more planted.

Mr. Sanders. The sugar maple has been often tried in the city and has failed; whether it is because it will not grow under brick pavements or from some other reason, I cannot say. It is out of the question entirely. I observe some European lindens at Fifteenth street and Clark avenue which seem to be flourishing.

Mr. Jewett. I have something to say about the essay read last week by Dr. Morse. I think it is a misfortune that any one who pretends to good taste in arboriculture should recommend the alanthus. It is not only a bad smelling, disagreeable tree, both in flower and leaf, but it destroys everything else around it. It throws up its suckers even through the brick pavement. It does not grow so fast after all. Like noxious weeds, it will grow in any soil; but if you properly plant and tend an elm it will grow as fast as an alanthus. Then, after the alanthus is grown the shade is poor; it looks well for a few years and then it gets scrawny and becomes intolerable. I perceive that in Lucas Place the owners of property have had the good taste to discard, almost entirely, this despicable tree. There they have put out elms and maple, and even now that is the most beautiful

street in the city. In ten years more, you will see a still more beautiful result of this forethought. Now, look at Olive street—an old street—where for fifteen years or more, locusts, catalpas and alanthuses have been mainly relied on. With here and there a residence, in front of which are some fine elms or maples, this street looks shabby.

Now, I am not alone in my detestation of the alanthus. I will give you some good authority. I will read the opinion of A. J. Downing, written the last year of his life. All will conclude that this is good authority on the subject. Mr. Jewett then read from Downing's Rural Essays, page 311, written August, 1852, as follows: "Down with the alanthus, is the cry we hear on all sides, town and country, now that this tree of heaven (as the catalogues used alluringly to call it) has penetrated all parts of the Union and begins to show its true character. Down with the alanthus; its blossoms smell so disagreeably that my family are made ill by it," says an old resident on the squares in New York. "The vile tree comes up all over my garden," say fifty owners of suburban lots who have foolishly been tempted into bordering the outside of their yards with it, having been told that it grows "surprising fast." "Down with the alanthus, therefore," we cry with the populace; but we have reasons beside these. The vices of the alanthus—the incurable vices of the by-gone favorite—are two-fold. In the first place, it smells horribly, both in leaf and flower, filling the air with a heavy, sickening odor; and in the second place, it suckers abominably, and therefore overruns, appropriates and reduces to beggary all the soil of every piece of open ground in the vicinity."

Mr. Jewett continued. Now I might read four times as much more from Downing on the same point, but this will suffice to show what his opinion was of this vile tree. It is a duty we owe to ourselves to disclaim and disown any attempt, by whomsoever made, to keep the alanthus in being as a shade tree in our city.

Mr. Kelly. I don't think we need to exert ourselves much to kill the alanthus—it is dead already; nobody thinks of planting it any more.

There is one thing which has greatly hindered the cultivation of trees in the city. When a man builds a house and proposes to put out trees in front of it, he is always in a big hurry. He wants a big tree at once. He will give any price for a tree as large as your leg, and will not be persuaded to take one an inch in diameter. The consequence is that his big trees, with the roots all cut off, chucked down into a little square hole in the pavement, will dwindle along two or three years and then die. After that the man is discouraged and gives it up. We must try to persuade people to buy small trees with roots on, and put them out well, and then there will be no difficulty.

Mr. Sanders. That is so. Nine-tenths of those who want shade trees in front of their residences, want big trees. They will pay any price for them. They come to us for big trees, and when we tell them the smaller and more thrifty tree will be larger in five years than the big one, they will not believe it, but think it a trick to sell the little trees.

Dr. Edwards. In reading over Dr. Morse's essay, as published among the proceedings, I was amazed that he should seriously recommend not only the alanthus, but that other vile tree the honey locust—or three-thorned locust. It is the last tree I should think of putting out in the streets of a city. Its thorns, continually dropping to be picked up by ladies dresses, and trod upon by children, would become an intolerable nuisance.

Dr. Claggett. I agree with Dr. Edwards in expressing surprise that the honey locust should even be thought of as a shade tree in a city. Besides I doubt much whether it would grow at all under the sidewalk, as it thrives only in low damp ground.

Mr. Cozzens. I conceive that every man in the city who owns property, can afford to improve and ornament that property; to go to the expense of getting the best variety of trees, and then having it done well and the tree properly protected. This course will prove to be far cheaper in the end than to do the work imperfectly or shabbily to save a little expense.

The subject having been at this and former meetings of the Society thoroughly discussed, Messrs. Jewett, Cozzens and Peabody were appointed a committee to bring in a brief report at the next meeting, covering the following points:

- 1st. The best varieties of shade trees for St. Louis.
- 2d. The best method of planting them.
- 3d. The best way to protect and take care of them.

CHAS. PEABODY, Sec. pro tem.

St. Louis, Saturday, Sep. 22, 1866.

President Colman being absent, W. F. Cozzens was chosen President, Pro-tem.

The following fruits were presented: By Mr. Kelly, St. Louis county, apples—Winesap, Michael Henry Pippin, Ladies' Sweeting, White Winter Pearmain, Baldwin, Lady Apple, Smith's Cider, Newtown

Spitzenberg, Pryor's Red, American Golden Russet, Romanite, Rambo, and Newtown Pippin.

By Mr. Tice, St. Louis county, a seedling grape of dark amber color, and the Offer grape, light amber, both thick skin and tough pulp, and raised by Mrs. Offer, of Painesville, Ohio. Both varieties very foxy in flavor.

By Mr. Gerber, from W. C. Thomas, Middlebrook, Missouri, specimens of a brilliant colored crimson plum, not fully ripe, unknown to members of the Society.

There being but a small number of members in attendance, the meeting adjourned to Saturday, Oct. 13, at 2 o'clock, P. M.

CHARLES PEABODY, Sec. pro-tem.

Warsaw (Ills.) Horticultural Society.

The September meeting of this Society was held at the residence of A. C. Hammond, on the 28th. There was only a moderate attendance, but the presence of ladies, the variety of fruits on exhibition, the interesting discussions, and the beauty of the day, together with the hospitable manner in which they were received by Mr. H. and his family, rendered this the best of the Society's meetings.

On the table was a great variety of fruits, consisting as follows:

By Wm. Bander, Catawba grapes.

G. B. Worthen, Catawba, Delaware, Taylor's Bullitt, Concord and Oporto grapes.

Dr. Lyon, some beautiful Seckel pears, and Norton's Virginia and Rogers' Hybrid Nos. 2, 3, 4, 15, and 19, grapes.

W. W. Chittenden, a choice variety.

A. C. Hammond, King of Tompkins County, Fulton Strawberry, Cooper, Belmont and other apples. Bartlett, White Doyenne, Flemish Beauty, Beurre Diel and Osband's Summer Pears. Iona, Diana, Ives' Seedling, Concord and Clinton grapes.

By the President, Rambo, Maiden's Blush, Fall Pippin, Swaar, Winesap, Rawle's Janet, Orley (or White Belleflower), Red Belleflower, Westfield Seek-no-further, and many unnamed sorts of apples.

G. B. Worthen, Catawba and Delaware wines.

A. C. Hammond, Clinton wine, vintages of '64 and '65.

The Society was invited to examine the orchard, the oldest trees of which are now eight years since transplanting from the nursery.—In this orchard Mr. Hammond has about 600 trees, say one-half of which are bearing fruit this year. Most conspicuous and most remarkable among these is the Ben Davis or Red Pippin, every tree of which is bending to the ground with its noble-looking fruit, and averaging perhaps 6 to 8 bushels to the tree. Next noteworthy are the Winesap and Rawle's Janet. But of the 600 trees in this orchard, his 50 Ben Davis are bearing this year nearly, if not quite, one-half the fruit of the whole. And the result is similar every year. The clean and thrifty condition of the trees, their well-shaped heads and smooth stems, were worthy of special remark. The following is an exhibit of his fruit planting.

1900 apple trees, of 90 varieties. Leading sorts, Ben Davis, Winesap, Rawle's Janet, Maiden's Blush, Fall Wine, Rome Beauty, Hubbardston Nonesuch, Peck's Pleasant.

300 peach, 20 varieties. 150 cherry, principally Early Richmonds. 50 pears, 18 varieties. 50 plum, quince, apricot, nectarine. 2½ acres grapes, mostly Concord, Clinton and Catawba. 2½ acres blackberries, Lawton. 1 acre strawberries, Wilson. ¼ acre currants, principally Red Dutch and White Grape. ¼ acre raspberries, mostly Purple Cane, Franconia and Black Cap. ¼ acre gooseberries, Houghton.—40 acres in fruit. 3½ miles Osage Orange fence.

After business the members partook of a bountiful supper.

Adjourned to next regular monthly meeting, on the last Friday of October, at 2 P. M., at the residence of Dr. Hay.



OUR PRIVILEGES.

That we have the sky over us, always to see whenever we like, with its clouds so ever-varying, and its sunsets, to say nothing of the broad dome itself, with the stars at night and the moon—to have this always over us with its infinity—this is something that, were we not used to it, and saw it for the first time, would overwhelm us. Naked above us is the universe, with what there may be of heaven, and of distances, and speculation. 'Tis a favor that we do not appreciate. The grandeur and immensity, were we to understand it, would make us better, and enlarge our enjoyments.

Then there is the wind, with its thousand varying ways; and the earth rounding up to the sky, ever facing it, receiving its benedictions; and the birds ever wild, and yet tame; nature has brought them, and would bring them whether we will it or not. How neatly and perfectly she makes them; and brooks as companions; and mountains as friends, ever in sight; and valleys to match; and flowers and herbs; and civilization; but this is another field, the cultivated field—the range of meadow and pasture and waving grain, and human interest, love, affection, reliance, character, deeds, and the hope of immortality. And you and I may possess it—perhaps do possess it; but most of all, domestic life, with its virtues and its contentment—a Christian life, and no fear of death.

These are some of the privileges of mankind to enjoy, each, and daily. Do we enjoy them? some men do. They are inestimable, and should be enjoyed by all.

THE WAY TO WEALTH.

[Concluded from last issue.]

"III. So much for industry, my friends, and attention to one's own business; but to these we must add frugality, if we would make our industry more certainly successful. A man may, if he knows not how to save as he gets, keep his nose all his life to the grindstone, and die not worth a groat at last. 'A fat kitchen makes a lean will;' and

'Many estates are spent in getting,
Since women for tea forsook spinning and knitting,
And men for punch forsook hewing and splitting.'

"If you would be wealthy, think of saving as well as of getting. The Indies have not made Spain rich, because her outgoes are greater than her incomes.

"Away, then with your expensive follies, and you will not then have as much cause to complain of hard times, heavy taxes, and chargeable families. And further, 'What maintains one vice would bring up two children. You

may think, perhaps, that a little tea or a little punch, now and then, diet a little more costly, clothes a little finer, and a little entertainment now and then, can be no great matter; but remember, 'many a little, makes a mickle.' Beware of little expenses; 'A small leak will sink a great ship,' as Poor Richard says; and again, 'Who dainties love, shall beggars prove;' and moreover, 'Fools make feasts and wise men eat them.'

"Here you are, altogether at this sale of knick-knacks. You call them *goods*; but, if fineries, take care, or they will prove *evils* to some of you. You expect they will be sold cheap, and perhaps they may for less than the cost; but, if you have no occasion for them, they must be dear to you. Remember what Poor Richard says, 'Buy what thou hast no need of, and ere long thou shalt sell thy necessities.' And again, 'At a great pennyworth, pause a while.' He means that perhaps the cheapness is apparent only, and not real; or the bargain, by straightening thee in thy business, may do thee more harm than good. For in another place he says, 'Many have been ruined by buying good pennyworths.' Again, 'It is foolish to lay out money in a purchase of repentance,' and yet this folly is practiced every day at auctions, for want of minding the almanac. Many a one, for the sake of finery on the back, has gone with a hungry belly and half starved their families. 'Silks and satins, scarlets and velvets, put the kitchen fire out,' as Poor Richard says.

"These are not the necessities of life; they can scarcely be called the conveniences, and yet only because they look pretty, how many want to have them? By these and other extravagances, the genteel are reduced to poverty, and forced to borrow from those whom they formerly despised, but, who, by their frugality, have maintained their standing, in which case it appears plainly that 'A plowman on his legs is higher than a gentleman on his knees,' as Poor Richard says. Perhaps they have had a small estate left them, which they knew not the getting of; they think 'It is day and it will never be night,' that a little to be spent out of so much is not worth minding; but 'Always taking out of the meal tub and never putting in, soon comes to the bottom,' as Poor Richard says; and then, 'When the well is dry, they know the worth of the water.' But this they might have known before if they had taken his advice. 'If you would know the worth of money, go and try to borrow some, for he that goes a borrowing goes a sorrowing,' as Poor Richard says; and indeed so does he that lends to such people, when he goes to get it again. Poor Dick further advises and says,

'Fond pride of dress is sure a very curse,
Ere fancy you consult, consult your purse.'

and again, 'Pride is as loud a beggar as Want, and a great deal more saucy.' When you have bought one fine thing, you must buy ten more, that your appearance may be all of a piece; but Poor Dick says, 'It is easier to suppress the first desire than to satisfy all that follow it. And it is as truly folly for the poor to ape the rich, as for the frog to swell in order to equal the ox.'

'Vessels large may venture more,
But little boats should keep near shore.'

"It is, however, a folly soon punished, for as Poor Richard says, 'Pride that dines on vanity, sups on contempt. Pride breakfasted with plenty, dined with poverty, and supped with infamy.' And after all, of what use is this pride of appearance, for which so much is risked, so much is suffered? It cannot promote health, nor ease pain; it makes no increase of merit in the person; it creates envy; it hastens misfortunes.

"But what madness must it be to run in debt for these superfluities? We are offered by the terms of this sale, six month's credit, and that perhaps, has induced some of us to attend it, because we cannot spare the ready money, and hope now to be fine without it. But ah! think what you do when you run in debt; you give to another power over your liberty. If you cannot pay at the time, you will be ashamed to see your creditor, and will be in fear when you speak to him; you will make poor, pitiful, sneaking excuses, and, by degrees, come to lose your varacity, and sink into base, downright lying; for, 'The second vice is lying, the first is running in debt,' as Poor Richard says, and again, to the same purpose, 'Lying rides on debt's back,' whereas a freeborn ought not to be ashamed, or afraid to see or speak to any man living. But poverty often deprives a man of all spirit and virtue. 'It is hard for an empty bag to stand upright.' What would you think of that prince or that government who should issue an edict forbidding you to dress like a gentleman or gentlewoman, on pain of imprisonment or servitude? would you not say that you were free, have a right to dress as you please, and that such an edict would be a breach of privileges, and such a government tyrannical? And yet you are about to put yourself under such tyranny, when you run in debt for such dress! Your creditor has authority at his pleasure to deprive you of your liberty, by confining you in jail, till you shall be able to pay him. When you have got your bargain, you may, perhaps think little of payment, but as Poor Richard says, 'Creditors have better memories than debtors; creditors are a superstitious set, great observers of set days and times.' The day comes round before you are aware, and the demand is made before you are prepared to satisfy it; or, if you bear your debt in mind, the time, which at first seemed long, will as it lessens, appear extremely short. Time will seem to have added wings to his heels as well as his shoulders. 'Those have a short Lent who owe money to be paid at Easter.' At present you may think yourselves in thriving circumstances, and that you can bear a little extravagance without injury, but

'For age and want, save while you may;
No morning sun lasts a whole day.'

"Gain may be temporary and uncertain, but even while you live, expense is constant and certain. 'It is easier to build two chimneys than to keep one in fuel,' as Poor Richard says, so, 'Rather go to bed supperless than rise in debt.'

"IV. This doctrine, my friends, is reason and wisdom, but, after all, do not depend too much upon your industry, and frugality and prudence, though excellent things, for they will all be blast-

ed without the blessing of heaven, and, therefore, ask that blessing humbly, and be not uncharitable to those that at present seem to want it, but comfort and help them. Remember, Job suffered, and was afterwards prosperous.

"And now to conclude, 'Experience keeps a dear school but fools will learn in no other,' as Poor Richard says, and scarce in that, for it is true, 'We may give advice, but we cannot give conduct.' However, remember this, 'They that will not be counselled cannot be helped;' and further, that, 'If you will not hear Reason, she will rap your knuckles,' as Poor Richard says."

Thus the old man ended his harangue. The people heard it and approved the doctrine, and immediately practised the contrary, just as if it had been a common sermon; the auction opened, and they began to buy extravagantly. I found the good man had thoroughly studied my almanacs, and digested all I had dropped on these topics during the course of twenty-five years. The frequent mention he made of me must have tired any one else, but my vanity was wonderfully delighted with it, though I was conscious that not a tenth part of the wisdom was my own which he ascribed to me, but rather the gleanings that I had made of the sense of all ages and nations. However, I resolved to be the better for the echo of it, and, though I had at first determined to buy stuff for a new coat, I went away resolved to wear my old one a little longer. Reader, if thou wilt do the same, thy profit will be as great as mine.

NATURAL HISTORY OF CONSUMPTION.—Two thin shoes make one cold, two colds an attack of bronchitis, two attacks of bronchitis one mahogany box.

A patient is undoubtedly in a bad way when his disease is acute and his doctor isn't.

Mrs. Partington says that Ike has got a horse so spirituous that it always goes off in a decanter.

A Boston spiritualist has discovered that cats have souls. Probably their heaven is the milky-way.

Jones thinks that instead of giving credit to whom credit is due, the cash had better be paid.

"Stop that abominable noise," said a commanding officer to a trumpeter, in the midst of a battle: "we can stand fire, but we can't stand that air."

A lady walking a few days since on the promenade at Brighton, asked a sailor whom she met, why a ship was called "she". The son of Neptune ungallantly replied, that it was "because the rigging costs so much."

What is taken from you before you get it? Your portrait.

A gentleman had occasion to advertise for a cook, and amongst other applications was one from a "young lady" of the profession, enclosing her "carte de visite!"

A good-natured fellow, who was nearly eaten out of house and home by the constant visits of his friends, was one day complaining bitterly of his numerous visitors.

"Shure, an I'll tell ye how to get rid of 'em" said an Irishman.

"Pray, how?"

"Lend money to the poor ones, and borrow money of the rich ones, and nather sort will iver trouble yez agin."

DOMESTIC DEPARTMENT.

BAKED INDIAN PUDDING.—Beat well together two teacups of Indian meal, one of flour, one of molasses, three eggs and a teaspoonful of salt. Add three pints of boiling milk, and a teaspoonful of ginger, stir all together into a buttered dish, and cover the top with cold milk.

KNIFE CLEANING.—Charcoal ground to powder is one of the best things ever discovered to clean knives. This is a late and valuable discovery.

TO OBTAIN FRESH BLOWN FLOWERS IN WINTER.—Choose some of the most perfect buds of the flowers you would preserve, such as are latest in blowing and ready to open, cut them off with a pair of scissors, leaving to each, if possible, a piece of stem about three inches long; cover the end of the stem immediately with sealing-wax, and when the buds are a little shrunk and wrinkled, wrap each of them up separately in a piece of paper, perfectly clean and dry, and lock them up in a dry box or drawer; and they will keep without corrupting. In winter, or at any other time, when you would have the flowers blow, take the buds at night and cut off the end of the stem sealed with wax, and put the buds into water wherein a little nitre or salt has been diffused, and the next day you will have the pleasure of seeing the buds open and expanding themselves, and the flowers display their most lively colors and breathe their agreeable odors.

OIL OF FLOWERS.—Split cotton wadding and dip in pure Florence or sweet oil; lay this in a jar or china dish; cover it with a thick layer of rose leaves, or any odoriferous flower or plant, from which you wish perfume. Then lay over another layer of cotton steeped in oil, and so on until filled. Cover it closely and place in the sun a week. Throw away the leaves and squeeze the oil in vials for use. The scented cotton will perfume your clothes.

TO PREVENT MOLD.—Collectors of books will not be sorry to learn that a few drops of oil of lavender will insure their libraries from this pest. A single drop of the same will prevent a pint of ink from mouldiness for any length of time. Paste may be kept from mold entirely by this addition, and leather is also effectively secured from injury by the same.

HON. JOHN D. PHILBRICK, Superintendent of Boston Public Schools, says of the *Student and Schoolmate*: Its merit is of the highest order. It is handsome and good. It is entertaining and instructive. It is, in all respects, a first-class Juvenile Magazine, and it is just the thing for the young folks. I wish every boy and girl might have the reading of it; and I shall be glad to speak a good word for it, if I can thereby promote its circulation. Wherever it goes it is sure to be read by the young folks; and, wherever it is read, it is sure to afford both pleasure and profit.

A FRESH SUPPLY

Of *Coe's Cough Balm*—the great remedy for coughs, colds, whooping cough, croup and all lung complaints—is received and for sale at our drug stores.

COE'S DYSPEPSIA CURE,

The only remedy ever discovered that will surely and permanently cure dyspepsia, indigestion, sick headache, and enable dyspeptics to eat hearty food without fear of distress, can be obtained at all our drug-stores.

Errors of Youth.

A GENTLEMAN who suffered for years from Nervous Debility, Premature Decay, and all the effects of youthful indiscretion, will, for the sake of suffering humanity, send free to all who need it, the receipt and directions for making the simple remedy by which he was cured. Sufferers wishing to profit by the advertiser's experience, can do so, by addressing, in perfect confidence, **JOHN B. OGDEN**, Oct. 15—6t No. 42 Cedar St., New York.

NURSERY FOR SALE.

The remaining stock and good will of the Hermann Nursery, one of the oldest and most reliable in the State. For further particulars, address **GEO. HUSMANN**, Hermann, Mo.

AN INTERESTING QUESTION.

What class of people will be most susceptible to attacks of Cholera?

Evidently those affected with any disease of the stomach, liver, or any of the organs appertaining to digestion. This class of persons will undoubtedly be more liable to contract this disease than those possessed of strong and healthy digestive organs.

The question then naturally arises, how shall we restore and keep these organs in a healthy and normal condition? We answer, by attention to diet, avoiding all undue excitement, using moderate exercise, avoiding all intoxicating drinks, no matter in what form presented, and by the use, according to directions of that great strengthening tonic,

Hooftland's German Bitters,

Prepared by Dr. C. M. JACKSON, Philadelphia.

This Bitters is a compound of Fluid Extracts. The roots and herbs from which it is made are gathered in Germany, and their virtues, in the form of extracts, extracted by one of the most scientific chemists and pharmacutists this country affords. It is:

NOT A LIQUOR PREPARATION.

In any sense of the word; contains no whisky, rum, or any other intoxicating ingredients, and can be freely used in families, without any fear or risk of those using it contracting the disease or vice of intemperance. We wish this fact distinctly understood, as many are apt to confound this Bitters with the many others before the public, prepared from liquor of some kind. During the

Cholera Season

Of 1849, this Bitters was extensively used throughout the entire country AS A PREVENTIVE, And we have not heard of a single instance in which this Bitters was used, where the persons suffered from any of the symptoms of Cholera.

THE GREAT STRENGTHENING TONIC

HOOFTLAND'S GERMAN BITTERS,

WILL CURE DEBILITY resulting from any cause whatever. Prostration of the System induced by severe Hardships, Exposure, Fevers, or Diseases of Camp Life.

Soldiers, Citizens, Male or Female, Adult or Youth, Will find in this Bitters a pure Tonic, not dependent on bad liquors for their almost miraculous effects.

This Bitters will cure the most severe cases of

DYSPEPSIA,

And Diseases resulting from Disorders of the Digestive Organs, and is the only sure, certain and safe remedy for LIVER COMPLAINTS. All are more or less affected during the spring and fall with torpidity of that important organ of digestion, the Liver. This Bitters, without containing any preparation of mercury, or by purging, acts powerfully on this organ, excites it to a healthy and lively action, and gives a tone to the whole system, hence,

HEALTH, ENERGY AND STRENGTH take the place of **SICKNESS, DEBILITY AND LASSITUDE.**

Hooftland's German Bitters,

Will cure every case of Chronic or Nervous Debility, Diseases of the Kidneys, and Diseases

Arising from a Disordered Stomach.

Observe the following symptoms resulting from disorders of the digestive organs:

Constipation, Inward Piles, Fullness of Blood to the Head, Acidity of the Stomach, Nausea, Heartburn, Disgust for Food, Fullness or Weight in the Stomach, Sour Eructations, Sinking or Fluttering at the Pit of the Stomach, Swimming of the Head, Hurried and Difficult Breathing, Fluttering at the Heart, Choking or Suffocating Sensations When in a Lying Posture, Dimness of Vision, Dots or Webs before the Sight, Fever and Dull Pain in the Head, Deficiency of Perspiration, Yellowness of the Skin and Eyes, Pain in the Side, Back, Chest, Limbs, &c., Sudden Flushes of Heat, Burning in the Flesh, Constant Imaginings of Evil, and Great Depression of Spirits.

BE SURE YOU GET THE GENUINE.

Prepared by Dr. C. M. Jackson, Philadelphia, with his signature on the wrapper and his name blown in the bottle. There are counterfeits in the market.

Price, Single Bottle, \$1, or half a dozen for \$5.

Should your nearest druggist not have the article, do not be put off by any of the intoxicating preparations that may be offered in its place, but send to us, and we will forward, securely packed by express.

Principal Office and Manufactory, No. 631 Arch St., Philadelphia, Pa.

CHAS. M. EVANS, Proprietor, mar15—1y [Formerly C. M. JACKSON & CO.]

FARMERS' INSURANCE COMPANY, OF ST. LOUIS, MO.

INSTITUTED BY STATE
AUTHORITY.

Authorized Capital,
\$100,000.00

Office—N. E. Corner of Fifth and
Chesnut Streets.

NORMAN J. COLMAN,
President.

P. M. KIELY, Secretary.

JOSEPH W. WHITE, Adjuster.

This Insurance Company has been organized especially for the benefit of

WESTERN FARMERS.

It will take no Fire Risks except on

FARM BUILDINGS.

It will not take Fire Risks in large towns or cities, which frequently prove so disastrous to Insurance Companies in case of large fires.

It will insure the LIFE OF ALL KINDS OF

LIVE STOCK.

It will insure Horses, Mules, Cattle, &c.,

AGAINST THEFT!

It will insure the

LIVES OF PERSONS,

For the benefit of the wife and children.

The FARMERS' INSURANCE COMPANY has been organized by and under the Laws of Missouri, with all these Special Departments of Insurance, and the custom of farmers who desire Insurance is respectfully solicited.

All business will be attended to with promptness and despatch. All

**LOSSES Will be promptly
Adjusted and Paid.**

**Efficient AGENTS wanted
in every County.**

Letters addressed to the Secretary promptly answered.

Imported Dutch Bulbous Roots. J. M. THORBURN & CO.,

15 John Street, New York,

Begin leave to announce to their friends and the Trade, that their Annual Descriptive Catalogue of Dutch Bulbous Roots, for the autumn of 1886; also, a Trade List of the same, are now ready for mailing to applicants, free.

We also take this opportunity to offer the following

BEAUTIFUL COLLECTIONS OF BULBOUS ROOTS.

No. 1.—ASSORTMENTS OF

- | | |
|---|----------|
| 6 Fine Named Double and Single Hyacinths, for pots, glasses or open border, | } \$2.00 |
| 1 Polyanthus Narcissus, | |
| 3 Early Tulips, | |
| 12 Fine Mixed Crocus, | |
| 1 Bulbocodium Vernal, | |
| By Mail 14 cents additional. | |

No. 2.—ASSORTMENTS OF

- | | |
|---|----------|
| 9 Fine Named Double and Single Hyacinths, for pots, glasses or open border, | } \$5.00 |
| 6 Fine Double Tulips, | |
| 15 Beautiful Named Early Tulips, | |
| 25 Fine Mixed Crocus, | |
| 3 Polyanthus Narcissus, | |
| 6 Double Narcissus, | |
| 3 Bulbocodium Vernal, | |
| 3 Persian Iris, | |
| 12 Double Snowdrops, | |
| By Mail, 38 cents additional. | |

No. 3.—ASSORTMENTS OF

- | | |
|--|-----------|
| 18 Fine Named Double and Single Hyacinths, for pots, glasses or open border, | } \$10.00 |
| 50 Fine Mixed Crocus, | |
| 24 Beautiful Named Early Tulips, | |
| 12 Fine Named Double Tulips, | |
| 4 Polyanthus Narcissus, | |
| 12 Double Narcissus, | |
| 3 Persian Iris, | |
| 3 English Iris, | |
| 1 Crimson Crown Imperial, | |
| 6 Bulbocodium Vernal, | |
| 25 Double Snowdrops, | |
| By Mail, 75 cents additional. | |

HYACINTHS.

Our Own Selections.

- | | |
|--|------------------|
| 12 Mixed Hyacinths (double and single), for pots or open ground, | 1.50 |
| 12 Named Double and Single Hyacinths, for pots, glasses, or open border, | \$3.00 |
| 12 Fine Named Double and Single Hyacinths, for pots, glasses, or open border, | \$4.00 |
| 12 Extra Fine Named Double and Single Hyacinths, for pots, glasses, or open border, | \$5.00 |
| 12 Our very best collection of Double and Single Named Hyacinths, for pots or open border, \$8. Mixture, | per 100, \$11.00 |
| By mail at the rate of 22 cts. per dozen additional. | |

MIXED HYACINTHS. For Open-air Culture.

- | | | |
|---|------------|--------|
| In quantities less than 1 dozen, 15 cents each. | | |
| Double Blue, all shades, | per dozen, | \$1.50 |
| Double Red, all shades, | | 1.50 |
| Double White, various colored eyes, | | 1.50 |
| Double Yellow, all shades, | | 2.50 |
| Double, all colors mixed, | | 1.50 |
| Single Blue, all shades, | | 1.50 |
| Single Red, all shades, | | 1.50 |
| Single White, various colored eyes, | | 1.50 |
| Single Yellow, all shades, | | 1.50 |
| Single, all colors mixed, | | 1.50 |
| By mail at the rate of 20 cts. per doz. additional. | | |

MIXED TULIPS For the Garden.

- | | | | |
|-------------------------------------|---------|---------|------|
| | per 100 | per doz | each |
| Fine Mixed Early Single, | \$6 | 75 | 08 |
| Fine Mixed Late Single, | \$6 | 75 | 08 |
| Fine Mixed Bizarre, | \$6 | 75 | 08 |
| Fine Mixed Bybloom, | \$6 | 75 | 08 |
| Fine Mixed Rose or White, | \$6 | 75 | 08 |
| Fine Mixed Parrot, | \$6 | 75 | 08 |
| Fine Mixed Double, | \$6 | 75 | 08 |

By mail at the rate of 6 cents per dozen additional. Also, LILIES, CROCUS, NARCISSUS, &c. &c., for all of which see our Descriptive Catalogue of Bulbs.

J. M. THORBURN & Co.,
15 John St., New York.

Oct. 1—3t

INDUCEMENTS TO FORM CLUBS.

Three Months Free!

THREE MONTHS FREE!!

THREE MONTHS FREE!!!

Colman's Rural World and
Valley Farmer:

The only Agricultural, Horticultural and Stock Journal, published in the Mississippi Valley,

Now in its Eighteenth year and volume, will be sent free the balance of this year to all persons subscribing now for next year. It is issued on the 1st and 15th of each month, on fine white paper, in 16 quarto pages, making a volume of 384 pages yearly. Farmers, Fruit Growers and Stock Breeders are contributors to its columns.

The object of its Editor is to make it a useful, practical, interesting and profitable journal for every man who cultivates a single acre of ground. Many of its subscribers have taken it from its commencement, and say they cannot afford to do without it. It is worth many times its subscription price to every Western farmer. Terms—\$2 per annum. Four copies \$6.

Large Premiums in Trees and
Plants will be given for Clubs.

Address, NORMAN J. COLMAN, Publisher,
St. Louis, Mo.

AGENTS WANTED

FOR THE

New Union U. S. Map.

A Copper Plate County, Railroad, and Battle-Field Map, showing everything from the Atlantic to the Pacific; 38 by 56 inches; and for the

Rebellion Battle Book.

A profusely illustrated, 700 page, royal octavo, One Volume History of the Civil War, with 268 distinct battle descriptions. The best book for Agents extant. And also for

Hundreds of New Maps, Charts,
Engravings and Photographs,
in great variety.

H. H. LLOYD & Co.,

PUBLISHERS, No. 21 John St. N.Y.

Oct. 1—2t

TEXAS OSAGE ORANGE

SEED—New, well cleaned and
WARRANTED GOOD. Price, \$1 per pound; \$20 per bushel; 6 bushels for \$100; for 10 bushels and over, \$15 per bushel. Old seed at half price. Cash to accompany order. We will also contract to grow No. 1 Osage Plants next season for \$1,000 per million, to be delivered in the fall at the nursery—25 cts. per thousand to be paid at time of contracting.

We are devoting special attention to the importation of the seed and growing the plants of the Osage Orange.

Apple Root Grafts put up to order, \$10 per 1,000; 12,000 for \$100. Address, W. H. MANN & BRO.,
Box 1, Normal, McLean Co., Ill.

P.S.—50 bushels Apple Seed wanted. Oct. 15—4t

Victoria and Linnæus Rhubarb,
or Wine Plant.

Also, CAHOON'S and SCOTCH HYBRID RHUBARB.

For sale by

C. D. STEVENS,
Mendota, LaSalle Co., Ill.

Oct. 15—4t

Nurserymen, Dealers and Planters

Will find at the

Columbus Nursery,

(Established 1855.)

A very large and complete assortment of
Fruit and Ornamental Trees,
Evergreens, Roses, Shrubs, Fine
Grapes, Small Fruits, &c. &c.,

Of Fine Quality, well adapted to Southern and West-
ern planting, and embracing of new and old, all that
has been found worthy of cultivation. Packing well
done to carry safely any distance. Facilities for
shipping unsurpassed. Call and examine stock, or
send stamps for catalogues.

R. G. HANFORD, Columbus, Ohio.
Sept. 1—4t.

ROUEN DUCKS—

A few pair of these superior ducks, bred from im-
ported stock. They are very large and fine.

Price, \$6 per pair, boxed, &c.

Address, F. CURTIS,
Oct. 15—3t Alton, Illinois.

GIVEN CAMPBELL,

Attorney at Law,

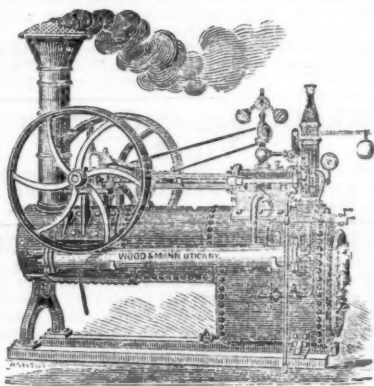
No. 5, Commercial Place,

NEW ORLEANS, LA.

REFERS TO—

W. L. Ewing. D. A. January. Rob't Campbell & Co.
Octly N. J. Colman.

WOOD & MANN STEAM ENGINE
CO.'S CELEBRATED
Portable Steam Engines,



From 4 to 35 horse power.

Also, PORTABLE SAW MILLS

We have the oldest, largest and most complete
works in the United States, devoted exclusively to the
manufacture of Portable Engines and Saw Mills,
which, for simplicity, compactness, power and econo-
my of fuel, are conceded by experts to be superior to
any ever offered to the public.

The great amount of Boiler room, fire surface, and
cylinder area, which we give to the rated horse power,
make our Engines the most powerful and cheapest in
use; and they are adapted to every purpose where
power is required. All sizes constantly on hand, or
furnished on short notice.

Descriptive Circulars with Price List, sent on appli-
cation.

WOOD & MANN STEAM ENGINE CO.,
Utica, N. Y.

Branch Office, 96 Maiden Lane, N. Y. City.
July 1—1y

REMOVAL.

St. Louis Agricultural Warehouse and Seed Store,

[Established 1845, by Wm. M. Plant.]

SIGN OF THE GILT FLOW.

NOS. 116 & 118 SOUTH MAIN ST.,

Also, No. 820 NORTH FOURTH STREET (Fronting on two streets), & 823 BROADWAY,
SAINT LOUIS, MO.

Plant & Brother,

Wm. M. PLANT.]

[ALFRED PLANT.

Wholesale and Retail Dealers in and Manufacturers' Agents for the Sale of

Agricultural Implements and Machines

Leather and Rubber Belting, Hose, Steam Packing.

Howe's Standard Scales.

Pearce's Plantation Cotton Spinners.

WOOL CARDING MACHINES, COACH SCREWS, STORE TRUCKS;
CISTERN, DEEP WELL, ENGINE AND CHAIN PUMPS; &c.

Krauser's Improved Portable Cider Mill and Press.

Sugar Cane Mills and Juice Evaporators.

Cotton Gins, Hand and Power Corn Shellers.

Smith's Patent Cast Cast-Steel Plow.

Young's and Tobey & Anderson's Peoria steel Plows.

STAFFORD'S 2-HORSE SULKY CULTIVATOR.

Selby's double check row CORN PLANTER.

McGaffey's Double-Check Row or Drill Corn Planter.

Kirby's American Iron Reaper and Mower.

Sulky and Revolving Horse Hay Rakes.

PALMER'S EXCELSIOR HORSE HAY HOISTING FORK.

Palmer's Revolving Hay Stacking Machine.

Also, a full supply of Warranted Fresh and Genuine

GARDEN, GRASS & OTHER SEEDS, growth of 1865.

All of which we offer at the lowest possible CASH PRICES.

Call and get Illustrated Catalogue furnished Gratis.

St. Louis, Mo., Feb. 1866.

PLANT & BRO.

25,000 Superior Concord Layers

for sale, at \$100 per 1000, \$12.50 per 100, by
Sept. 1—4t E. A. RIEHL, Alton, Ill.

Important to Farmers.

HOWE'S PATENT CONCAVE

POST HOLE AUGER.

This implement has been in use but a short time,
and is becoming very popular.

The ease with which it goes into the hard ground,
is surprising to all who have tried it.

The blade is made of the best cast steel, and every
Auger is warranted to give satisfaction.

For sale at retail by most of the merchants
throughout the State, and at wholesale by

WARNE, CHEEVER & CO.,

IMPORTERS AND JOBBERS OF

HARDWARE

And Cutlery,

Nos. 302 and 304 Washington Av.,

ST. LOUIS.

Sole Agents for the State of Missouri.

Oct. 1—2t

Bloomington Nursery.

15TH YEAR — 8 Large Green-
HOUSES, 275 ACRES FRUIT, ORNAMENTAL
AND NURSERY STOCK, a very complete assort-
ment, including

500,000 APPLE, with 100,000 1 year; 1000, \$50.
150,000 PEAR, 50,000 1 year standard; 1000, \$120.
500,000 GRAPE, largely Concord layers; Cataw-
ba, Clinton, Delaware, Hartford,
Ives, Iona, Rogers, &c.

500,000 APPLE STOCKS, 1 and 2 year, \$10 & \$15.
500,000 APPLE ROOT GRAFTS, in Winter;
10,000, \$100.

150,000 STOCKS, Quince, Pear, Plum, Cherry, &c.
10,000 RHUBARB "WINE PLANT." 100,000
Strawberry, 40 sorts

1,000,000 OSAGE ORANGE, 1,000 1st class, \$3;
200,000, \$150.

500,000 EVERGREENS, mostly medium and small.
150,000 ORNAMENTAL TREES, large and small.

2,000 ALTHEA, superb, double named; 100, 2
feet, \$12.

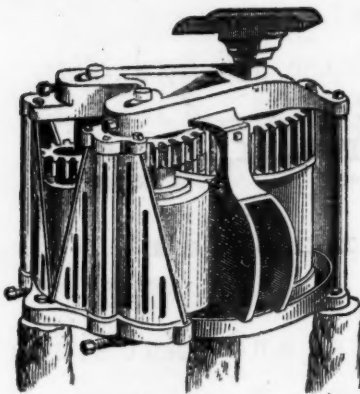
10,000 Euonymus, Honeysuckle, Lilac, Snowball,
Spiraea, Syringa, Tamarix, Wigelia, all
fine, medium size; 100, \$6 to \$12.

20,000 ROSES, all classes, old and new sorts.
20,000 HARDY BULBS, Tulips, Hyacinths,
Greenhouse Plants, &c.

Catalogues, wholesale and retail, sent for one
red stamp each. F. K. PHOENIX.

Bloomington, McLean County, Illinois.

Oct. 15—4t



Western Agricultural Depot
and Seed Store,

WM. KOENIG & CO.,

No. 207, Old No. 56 North Second St.,
St. Louis, Mo.

Dealers in

The Victor Sugar Mill and
COOK'S EVAPORATORS.

THE CELEBRATED

CHAMPION Cider and Wine Mill.

The World Renowned Sweepstake Thresher and Cleaner.
The Celebrated Moline Plows. Corn Shellers for Hand and Power.
Hoosier and Telegraph Straw and Corn Stalk Cutters.
Cut-off Saws and Horse Powers, and Agricultural Implements in
general.

And Dealers in


Timothy, Clover, Blue Grass, Red Top,
Orchard Grass, and



LANDRETH'S

Celebrated Garden Seeds, constantly
on hand.

JEFFERSON CITY

 Agricultural Warehouse.

R. A. Huffard,

Dealer in

**AGRICULTURAL
TOOLS AND MACHINES,**

High Street, Jefferson City, - - - Missouri.

Will keep constantly on hand,

**GARDEN, GRASS AND
OTHER SEEDS,**

Peoria, Rock Island, Clipper, and other Plows,
Harrows, Horse Rakes,

Straw and Hay Cutters,

Churns, Spades, Shovels, Forks,

Chains, Hames, Rakes, Hoes,

Corn Planters, &c. &c.

SULKY AND GANG PLOWS.

Agent for the Sale of

Leather and Rubber Belting,

Rubber and Hemp Packing,

And Lace Leather.

PORTABLE PLANTATION GRIST MILLS.

Pumps of all kinds, Wool Carding Machines,

Cider and Wine Mills. Also, Agent for

All kinds of Fruit Trees, Shrubbery,

Evergreens, Roses, &c.

Any article not on hand when called for will
be ordered immediately.

Lyon's Periodical Drops.

THE GREAT FEMALE REMEDY FOR
IRREGULARITIES.

These drops are a scientifically compounded fluid preparation, and better than any Pills, Powders, or Nostrums. Being liquid, their action is direct and positive, rendering them a reliable, speedy and certain specific for the cure of all obstructions and suppressions of nature. Their popularity is indicated by the fact that over 100,000 bottles are annually sold and consumed by the ladies of the United States, every one of whom speak in the strongest terms of praise of their great merits. They are rapidly taking the place of every other Female Remedy, and are considered by all who know aught of them, as the surest, safest and most infallible preparation in the world, for the cure of all female complaints, the removal of all obstructions of nature, and the promotion of health, regularity and strength. Explicit directions stating when they may be used, and explaining when and why they should not, nor could not be used without producing effects contrary to nature's chosen laws, will be found carefully folded around each bottle, with the written signature of JOHN L. LYON, without which none are genuine.

Prepared by Dr. JOHN L. LYON, 195 Chapel St. New Haven, Conn., who can be consulted either personally or by mail (enclosing stamp), concerning all private diseases and female weakness. Price \$1.50 per bottle. Sold by druggists everywhere.

C. G. CLARK & CO.,

Gen'l Agents for U.S. and Canadas.

COLLINS Bro's, Wholesale Agents, St. Louis.

Decl-ly

**50,000 CONCORD GRAPE
VINES FOR SALE.**

Price, First Class, per thousand, \$75.

Second Class, " \$50.

Delaware Layers, \$20 per 100; " \$150

Clintons, " \$40

These Vines are very fine. Address,

D. W. KAUFFMAN, Des Moines, Iowa.

Sep. 15-5t

CHOICE

FRUITS, FLOWERS, SEEDS, &C.

**B. M. WATSON, OLD COLONY NURSERIES
AND SEED ESTABLISHMENT, PLYMOUTH,
MASS.,** offers a complete assortment of the
hardiest and most productive sorts. The finest
GRAPES, new large CURRANTS, STRAWBERRIES,
RASPBERRIES, GOOSEBERRIES, BLACKBERRIES,
ROSES, FLOWERING PLANTS, BULBS, LILIES,
SEEDS, &C. may be sent by MAIL, prepaid, in per-
fect order. FRUIT and ORNAMENTAL TREES
and SHRUBS, EVERGREENS, HEDGE PLANTS,
&C., will be sent by Express or Freight, paid to
Boston. Also, the TRUE CAPE COD CRANBER-
RY, for cultivation in Wet land, or in upland and
Gardens, where it produces at the rate of 400 bushels
to the acre, with directions for cultivation. Priced
Descriptive Catalogues will be sent to any address.—
Now is the BEST TIME for PLANTING. The best
way to obtain good FRUITS and FLOWERS, is to send
direct to the Grower. Send for a Catalogue.

Wholesale Catalogues to the trade. Agents wanted
Oct. 15-2t

**ADIRONDAC GRAPE NUR-
SERY AND VINEYARD.**

Superior Vines at Low Prices.

40,000 ADIRONDAC GRAPE VINES, of one,
two and three years—the earliest and
best Native Grape. Also, Iowa, Israella, Delaware,
Allen's Hybrid, Diana, Concord, Crevling, Cayaha-
ga, Hartford Prolific, Maxatwny, Miles, Roger's
Hybrids, Rebecca, Sherman, Union Village, &c.

Sample vines securely packed and sent by mail when
ordered. Descriptive and Priced Catalogues sent
on application. **JOHN W. BAILEY & CO.,**
Sep. 15-4t Plattsburgh, Clinton Co., N.Y.

EARLY GOODRICH POTATO.

I will sell my surplus of Early Goodrich Potatoes,
at the following rates—\$1.25 per peck; \$4 per bushel,
and \$10 per barrel (of 165 lbs.) I will also send as
many selected potatoes by mail as the law will allow
for \$1. Their rapid growth and early maturity make
them a very desirable sort where the potato bug is
troublesome, and eminently fits them for the moun-
tain mining regions of the West. Orders for points
on the Missouri river should be received before naviga-
tion closes. Shipments will be made from Sioux
City by Express or as freight, as parties direct.

Also, a few of the Gleason, the best late variety at
the above prices. Direct to **L. M. BROWN,**
Sept. 15-3t Woodbury, Woodbury Co., Iowa.

**50,000 Concord Grape
Vines.**

I have for sale 50,000 Concord Grape Vines, at \$70
per thousand. **WASHINGTON MILLER,**
Sept. 15-4t Des Moines, Iowa.

THOROUGH-BRED SPANISH SHEEP FOR

**SALE—I have for sale, of pure Spanish Stock, a
FEW EWES AND BUCK LAMBS. They can be
seen at my premises, two miles south of Nilwood,
Chicago and St. Louis R. R. The lambs are sired
by the celebrated Infatado Ram "Prince." Orders
promptly filled by express, properly boxed, and sat-
isfaction given. **R. H. BALLINGER,**
Oct. 1 Nilwood, Macoupin Co. Ill.**

GRAPE VINES.

For sale about 40,000 well-rooted grape-vine layers
and rooted cuttings, comprising all the Hardy varie-
ties, such as Norton's Virginia Seedling, Concord,
Hartford Prolific, Clinton, &c.

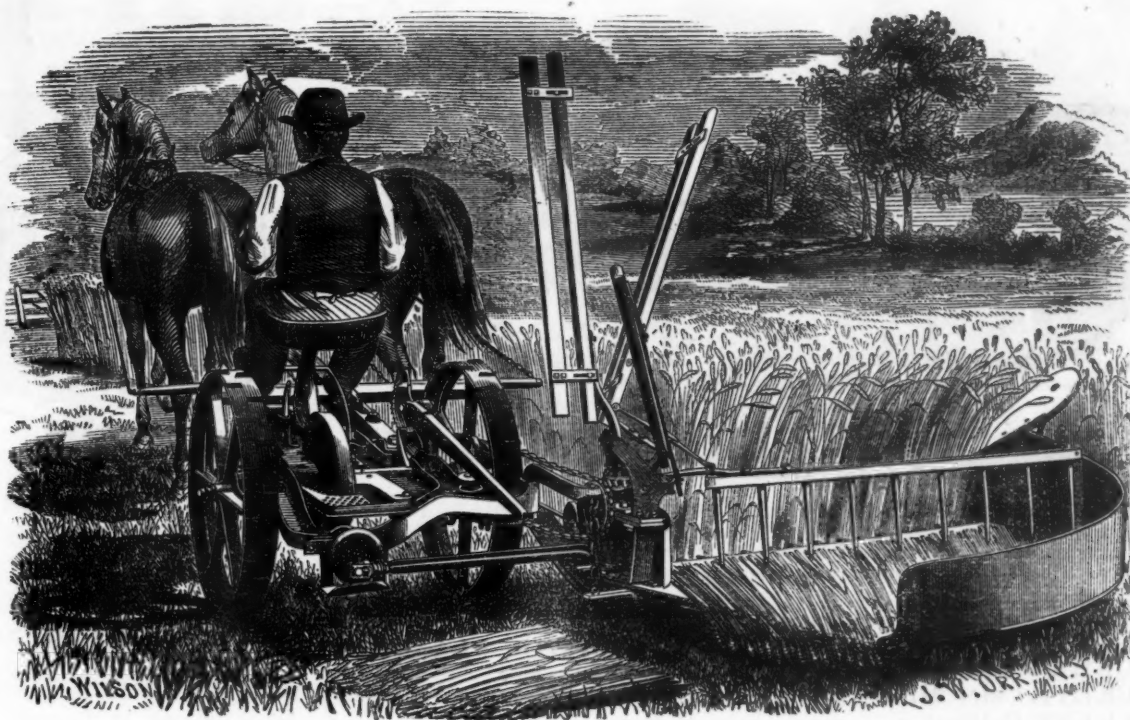
EISENMAYER & BRO.,

Sept. 1.

Mascoutah, Ills.

CASHMERE GOATS.

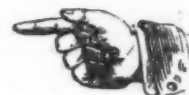
I have about 30 goats for sale, some of them
three-quarter Cashmere, some half Cashmere,
and some of them common goats. To any one
who desires to breed the Cashmere goat, a rare
chance is now offered. I am about converting
the farm at which I keep them, into a fruit
farm, which is my reason for selling them. Or
I would let them to any responsible person on
shares for a term of years. For further partic-
ulars, address **NORMAN J. COLMAN,**
St. Louis, Mo.



THE PREMIUM MOWER AND REAPER.



Dodge's Harvester!



AWARDED THE

SPECIAL DIPLOMA AND GRAND MEDAL OF HONOR.

AS THE BEST

COMBINED MOWER!

HAND RAKING REAPER!

AND SELF-RAKING REAPER!

On Exhibition at the GREAT FAIR of the ST. LOUIS AGRICULTURAL AND MECHANICAL
ASSOCIATION, Oct. 6th, 1866.

STATEMENT OF THE COMMITTEE.

The undersigned, the Awarding Committee on Mowers and Reapers at the Sixth Fair of the St. Louis Agricultural and Mechanical Association, as an act of justice to L. J. BUSH & CO., of this city, would state, that upon careful investigation of ALL the Machines on exhibition, unanimously decided that the "Dodge" Machine was entitled to the First Premium as the BEST COMBINED SELF-RAKING REAPER AND MOWER, and MADE THE AWARD ACCORDINGLY. But upon representation made us that the "Dodge" was NOT PROPERLY ENTERED upon the Books of the Association, we felt obliged to change the premium to the "Kirby," at the same time GIVING THE PREFERENCE to the "DODGE" as the BEST Machine. We therefore commend the "DODGE" as the Best Combined Mower and Hand and Self-Raking Harvester, and award it a SPECIAL DIPLOMA and MEDAL of HONOR.

THOS. SKINKER, Chairman,
THOS. G. SETTLE,
DAVID W. BRYANT,
JAMES MILLER.

Committee.

St. Louis, Oct. 6, 1866.

QUERY: Of what value is a premium on a Machine, given UNDER PROTEST that it is INFERIOR?

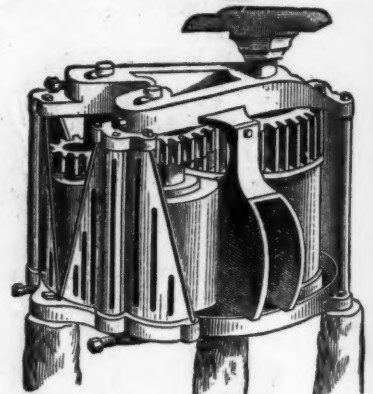
The Committee did not wish to deceive farmers by their award of First Premium, as to the merits of the machines, therefore we publish this statement.

L. J. BUSH & CO., 13 South Main St., St. Louis.



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Missouri Agricultural Warehouse
And Seed Store,

No. 25 South Main St.,
Sign of the OX YOKES hangs di-
rectly over entrance, 3 doors North
of Walnut Street,
ST. LOUIS, MISSOURI.



Wholesale and retail dealers in Agricultural Implements and Machines, Garden, Grass & Field Seeds.
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These Mills and Evaporators have universally received the stamp of public approval, and we invite all interested to call and examine.

ALSO AGENTS FOR

CHAMPION of OHIO Reapers and Mowers.
BUCKEYE Wheat Drill.
BUCKEYE Cider Mill.
BUCKEYE Cultivator.
VANDIVER'S Mo. Corn Planter, Also on hand various patterns of
ALLEN'S COTTON PLANTER, Cutting Boxes, Corn Shellers,
PITTS' Threshers and Horse Cotton Gins, &c.
Powers. **MISSOURI FAMILY WASHING**
Machine and Wringer.

Barnum & Bro., 25 South Main St., 3 doors north of Walnut.

NATIVE WINES.

Norton's Virginia, Concord, Herbemont, Delaware, Cunningham, Cassady, Clinton, Hartford Prolific and Catawba, by the case, containing 1 dozen bottles each. Norton's Virginia, Concord and Catawba, also by the keg, barrel or cask.

As these wines were all grown on my own vineyards, and carefully managed, I can warrant them to be of superior quality and to give general satisfaction.

Sample cases, containing one dozen bottles assorted of all the above varieties, will be put up if desired
Address, **GEO. HUSMANN, Hermann, Mo.**

PRICE LIST OF WINES,

Grown by

**GEORGE HUSMANN, GRAPE HILL VINE-
YARDS, NEAR HERMANN, MO.**

In cases of one dozen bottles each—

Norton's Virginia, first quality,	\$18.00
Concord, first quality,	12.00
Concord, second quality, very good,	10.00
Herbemont, first quality,	18.00
Delaware, first quality,	24.00
Cunningham, first quality,	18.00
Cassady, first quality,	12.00
Clinton,	10.00
Hartford Prolific,	16.00
Catawba, first quality,	10.00
Catawba, second quality, very fair,	\$ 8.50

In casks, in quantities under forty gallons—

Norton's Virginia, first quality,	\$4.50 per gallon.
Concord, first quality,	3.00 "
Concord, second quality,	2.50 "
Catawba, first quality,	2.50 "
Catawba, second quality,	2.00 "
Herbemont, first quality,	4.50 "

In quantities over forty gallons—

Norton's Virginia, first quality,	4.00 "
Concord, first quality,	2.50 "
Concord, second quality,	2.00 "
Catawba, first quality,	2.00 "
Catawba, second quality,	1.75 "

As these wines were all grown on my own vineyards and carefully managed, I can warrant them to be of superior quality, and have no doubt but they will give general satisfaction.

Jy-14

GEO. HUSMANN.

DR. JACKSON'S BALSAM OF LUNGWORT.

The great remedy for Coughs, Colds, Sore Throat, Hoarseness, Spitting of Blood, Soreness of the

CHEST AND LUNGS, AND Consumption.

This old tried medicine stands higher in reputation than all others; its effects are prompt and certain, and it has cured more bad cases than all other medicines put together. Don't fail to give it a trial, and be convinced, as delays are dangerous.

Price One Dollar a bottle.

COLLINS BROTHERS,

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SOLE PROPRIETORS.

ITCH! ITCH!!

SALT DR. JACKSON'S SALT
RHEUM! ITCH OINTMENT. RHEUM!

Will cure the ITCH or SALT RHEUM.

In a few applications. It also cures prairie Scratches, Chilblains, Ulcers and all Eruptions of the skin where other remedies have been tried in vain, cures speedily and thoroughly. Price 50 cents a box. Sold by all druggists. By sending 60 cents in a letter to **COLLINS BROTHERS, S. W. cor. 2d & Vine streets, St. Louis, Mo.,** it will be sent by mail free of postage.
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GRAPE VINES—Norton's Virginia Seedling, Concord, Clinton, Hartford Prolific.

A large Stock of the above and all other leading varieties, grown from layers. Send for Price List.
Address, **HENRY MICHEL,**
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CHESTER WHITE PIGS.

A few pairs of Chester White Pigs on hand, boxed and shipped to any address, without further charge, on receipt of thirty dollars per pair or fifteen dollars each either sex. Also, some crosses of the Yorkshire and Chester White at same price.
Address,
NORMAN J. COLMAN, St. Louis, Mo.

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